FINLAND

COUNTRY PROFILE

**IMPLEMENTATION OF AGENDA 21:
REVIEW OF PROGRESS MADE SINCE THE
UNITED NATIONS CONFERENCE ON
ENVIRONMENT AND DEVELOPMENT, 1992**

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Division for Sustainable Development*
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http://www.un.org/dpcsd/earthsummit*

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FINLAND

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Note from the Secretariat: An effort has been made to present all country profiles within a common format, with an equal number of pages. However, where Governments have not provided information for the tables appended to Chapters 4 and 17, those tables have been omitted entirely in order to reduce the overall length of the profile and save paper. Consequently, there may be some minor inconsistencies among the formats of the different country profiles.

All statistics are rendered as provided by the respective Governments.

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IUCN	International Union for Conservation of Nature and Natural Resources
MARPOL	International Convention for the Prevention of Pollution from Ships
OECD	Organisation for Economic Cooperation and Development
PGRFA	plant genetic resources for agriculture
PIC	prior informed consent procedure
SADCC	South African Development Co-ordination Conference
SARD	sustainable agriculture and rural development
UNCTAD	United Nations Conference on Trade and Development
UNDP	United Nations Development Programme
UNDRO	Office of the United Nations Disaster Relief Coordinator
UNEP	United Nations Environment Programme
UNESCO	United Nations Educational, Scientific and Cultural Organization
UNFPA	United Nations Population Fund
UNICEF	United Nations Children's Fund
UNIDO	United Nations Industrial Development Organization
UNU	United Nations University
WCP	World Climate Programme (WMO/UNEP/ICSU/UNESCO)
WFC	World Food Council
WHO	World Health Organization
WMO	World Meteorological Organization
WWF	World Wide Fund for Nature (also called World Wildlife Fund)
WWW	World Weather Watch (WMO)

National Acronyms

WTO-CTE	World Trade Organization Committee on Trade and Environment

PROMOTION OF SUSTAINABLE DEVELOPMENT IN FINLAND

Sustainable development (SD) concerns almost all sectors of the society. Therefore, a broad cooperation has been generated in Finland among the government, the private sector, interest groups and NGOs, the scientific community, the education system and the media. Since 1987, Finland has striven systematically to promote sustainable development by integrating environmental considerations into sectoral policies. In the next stage, the emphasis should be on a holistic, strategic outlook and on operationalizing SD at various levels.

Since 1993, the **Finnish National Commission on Sustainable Development** (FNCSD) has coordinated different measures on sustainable development at different levels. In practice this means that the commission gives political impetus and guidance to these issues as well as makes practical proposals and follows their implementation. The political importance of SD in Finland is illustrated by the fact that the FNCSD is chaired by the Prime Minister Mr. Paavo Lipponen and co-chaired by the Minister of the Environment Mr. Pekka Haavisto. Five other Ministers are also members of the Commission. The 55 members of the commission represent Finnish society as broadly as possible including representatives of both the central and local governments, business and industry, labour unions, scientific community as well as various NGOs and interest groups. Finland's two official languages have also been taken into account as well as the Finnish indigenous people (the Sami). The FNCSD has an operational secretariat and three subcommittees (in addition, four other working groups also report to the FNCSD) to prepare the work for the commission. Moreover, at its meeting on December 1996, the FNCSD decided to set up a new subcommittee on local aspects of sustainable development. In its work, the new subcommittee will concentrate on transport and human settlements issues and will follow the implementation of local Agendas 21 in Finland.

One of FNCSD's most important undertakings has been the preparation of a comprehensive summary of measures needed to promote sustainable development: the "Finnish Action for Sustainable Development" (1995); also published in English. It includes measures that are already under way or in the pipeline for the next few years, both in Finland and through its international cooperation. The measures vary from sectoral programmes of different ministries and governmental bodies to information campaigns of NGOs. The work to engage various sectors in a more concrete way in the promotion of sustainable development has also begun: some of the most important sectors represented on the FNCSD are drawing up their own sustainable development strategies and programmes of action by the end of March 1997.

Another important contribution of the FNCSD and its subcommittees has been to promote participation and increase public awareness on SD through various means such as the Subcommittee on Education and Training, media briefings, news bulletins, discussions and seminars (both national and international). Furthermore, the Rio decisions have been published in Finnish and distributed widely in the society. One of the priorities of FNCSD's future work is assisting in preparing Finland's positions for the Special Session of the General Assembly on the Environment (7-13 June 1997).

The FNCSD has also drawn up recommendations regarding the preparation of the various **sectoral programmes on SD**, including the Agri-environmental Programme, Environmental Programme for Forestry, Strategy for Conservation of Forests, Action Programme for Reducing the Adverse Effects of Transport to the Environment and the Environmental Programme 2005. These sectoral programmes have been successful in reducing the direct environmental impact of various activities. It must be recognised that in the area of environmental protection, the problem of discharge from multiple diffused sources (such as agriculture) has not yet been resolved and will be the main focus of environmental protection. In the area of nature conservation, the focus is also becoming more holistic, e.g. concentrating increasingly on the conservation of biodiversity outside the protected areas.

Sectoral programmes and a focus on limiting discharges are not enough to resolve accumulated environmental problems and their underlying causes. Such issues are, in particular, the growth in energy consumption, the increase in traffic and the overuse of natural resources. We must change production and consumption patterns as well as the planning of human settlements to conform to the principles of sustainable development.

To this end the **Finnish Government** is in the process of preparing a **programme of action for sustainable development**. Its focus will be on areas central for sustainable development and areas that have not adequately been taken into account, i.e. human settlements development and transport, production, products and consumption patterns, rural development and energy. Furthermore, terms of reference set by environmental protection and nature conservation will be examined, as well as the integrated use of various instruments. The programme will include central strategic objectives, outlines for action and detailed measures to be implemented by the present Government. In addition, there will be proposals on the long-term measures still needed to achieve sustainable development. The programme will be finalized in the course of 1997. The sectors concerned are responsible for preparing the programme in co-operation with the Ministry of the Environment. By bringing the programme to the Finnish National Commission on Sustainable Development for discussion, opinions of the major groups are integrated into the programme.

It is not possible to promote sustainable development (SD) through administrative and legislative instruments alone. We also need other instruments to stimulate changes in human behaviour. Above all, there is a need for economic instruments and an increase in environmental awareness. Finland already has a variety of economic instruments in use such as taxes on commodities, environmental tax subsidies and graded taxes used in different tax schemes, certain administrative and municipal fees, financial subsidies as well as deposit systems related to recycling. Deposit systems especially have been quite successful. On the other hand, it must be recognised that in all cases the regulatory effect of the economic instruments in use is not sufficiently strong.

In the field of awareness raising, education on sustainable development is one of the central instruments and it has become a major element of all education and training from nursery schools to universities. Right now the focus is on improving environmental education in vocational schools. Another example of the growing awareness and the spread of ideas on SD is the Agendas 21 prepared at different levels. Many municipalities already have their own Agendas 21 or similar programmes, and by the end of 1997, some 130 of the 455 Finnish municipalities will have their own Agendas 21 covering approximately 55 % of the Finnish population. However, the smaller municipalities must be brought more fully into the Agenda work. This has been recognised by the Ministry of the Environment and the Association of Finnish Local Authorities, which give guidance and support in the preparation of Local Agendas. Agenda 21s are also being prepared at the regional level. Finland is actively involved in the preparation of the Baltic Agenda 21 for the Baltic Sea region and in the similar work soon starting in the Arctic region. Furthermore, an Agenda 21 is being prepared by the only indigenous people in Western Europe, the Sami people in Lapland.

Indicators on the state of the environment and SD are also urgently needed in order to focus our efforts in a consistent manner. Therefore, Finland is one of the countries testing the indicators on SD developed by the CSD. In addition, Finland is preparing its own national set of indicators due to be ready for use at the end of 1997. Local indicators and indicators used by different companies are also being developed.

One of the most important contributions to SD in Finland has been the major changes in the forestry sector, including forest management guidelines, forest industry (pulp, paper, other wood-based products), conservation etc. Finland has also been very active in the area of international cooperation to promote sustainable forestry and especially in developing criteria and indicators for sustainable forestry. In August 1996, Finland organized the **Intergovernmental Seminar on Criteria and Indicators for Sustainable Forest Management (ISCI)** as part of the work of the Intergovernmental Panel on Forests (IPF). The criteria and indicators for sustainable forestry are currently being tested in a pilot project in Finland.

In spite of the many successes that have been accomplished a lot remains to be done. After quite successful work done in combating pollution discharges and the most severe, acute environmental problems, promoting sustainable development faces great challenges. In Finland, an obvious and acute problem encountered has been the inability to establish a meaningful and positive relationship between employment and sustainable development. Given the high unemployment rate in Finland, fighting unemployment is a top national priority, and Finland must find ways in which SD and employment can be mutually beneficial.

Another challenge is to translate the growing awareness of SD into meaningful action, especially in the field of changing consumption patterns. Although eco-labelling has been one of the ways that have helped people to make sustainable choices in their everyday life, a lot more is needed. A positive sign of the changes under way is the fact that customers, suppliers, consumer and environmental organizations, even banks and insurance companies, are formulating new requirements with respect to the environmental performance of products. Environmental management and eco-auditing are some of the tools for this kind of development and they should be further strengthened. What we also need to do is to concentrate more than previously on the socio-economic, cultural and local aspects of sustainable development. All these aspects of our societies and life-styles have to be considered in order to make possible the necessary changes towards ecological sustainability. These aspects of SD are also priorities of the FNCSD in the future.

The changes in the world economy and in the global and regional governance systems have changed the operative environment in which we live. For Finland, the membership in the European Union in 1995 opened a range of challenges and possibilities that have to be taken into account in all our activities. One of the realities we have faced is the fact that in order for different measures and instruments to be effective (e.g. economic instruments such as energy taxation), they have to be designed and applied globally or regionally. This requires a long-term and sustained political commitment to SD at all levels of cooperation.

Thus, sustainable development policies are moving towards a new and more challenging stage in which a more comprehensive approach to SD is needed. What is also needed is, on the one hand, sustained international cooperation at different levels, and on the other, concrete action and implementation of Agenda 21 at the local and - most importantly - at the personal level. This is the case in Finland and in many other countries, too. Combating discharges has been relatively successful and it must continue. However, what is really needed are changes in lifestyle in the way Finland produces and consumes things, in the way people move about and in the way natural resources are used. Finland must now turn the raised level of awareness into implementation and action.

FACT SHEET

FINLAND

1. Name of Key National Sustainable Development Coordination Mechanism(s)/Council(s).

Finnish National Commission on Sustainable Development (FNCSD)

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Mailing address: P.O. Box 399
FIN-00121 Helsinki
Finland - Europe

2. Membership/Composition/Chairperson:

45 members (+ alternates), 10 expert members, full list on file.

2a. List of ministries and agencies involved:

Chairman: Mr. Paavo Lipponen, Prime Minister
Vice chairman: Mr Pekka Haavisto, Minister of the Environment

Other ministers: Mr. Olli-Pekka Heinonen, Minister of Education; Mr. Jan-Erik Enestam, Minister of Interior; Mr. Claes Andersson, Minister, Ministry of Education; Ms. Sinikka Mönkäre, Minister of Social Affairs and Health; Mr. Kalevi Hemilä, Minister of Agriculture and Forestry.

Ministeries: 12 ministries, full list on file.
Government research institutes: 7 expert members, full list on file.

2b. Names of para-statal bodies and institutions involved, as well as participating of academic and private sector bodies:

Para-statal bodies: Åland Provincial Government
Academic sector: Finnish Academy (alternate member: Finland Futures Research Centre)
Business and producers: 3 members, full list on file.

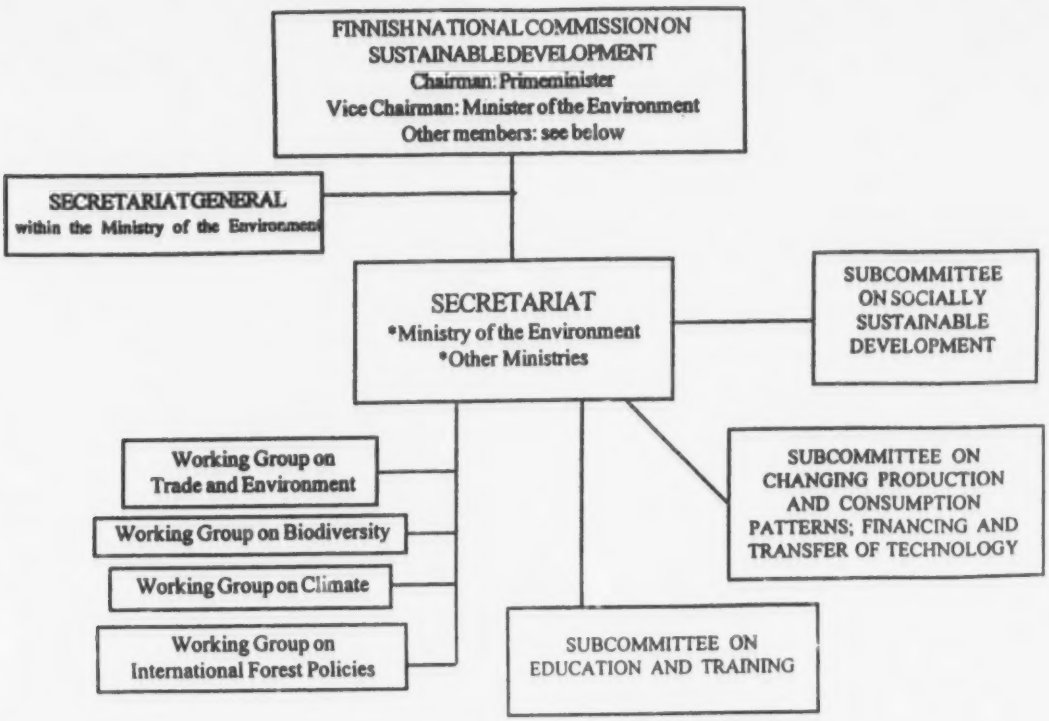
2c. Names of non-governmental organizations involved:

Other interest groups: 4 members + 1 alternate, full list on file.
Non-governmental organizations: 6 members + 2 alternates, full list on file.
Others: Sami Parliament (the parliament of the indigenous Sami-people), Association of Environmental Journalists.

3. Mandate role of above mechanism/council:

The Finnish National Commision on Sustaiable Development was established in June 1993. The compostion of the Commission was slightly changed in April 1996 due to the change of government. The Commission was established to promote and coordinate the implementation of sustainable development in accordance with the decisions taken in Rio. The actual implementation is in the hands of all: government, public administration, industry, private sector, as well as citizens. Therefore, the role of the Commission is to make proposals and coordinate the activities of various sectors.

4. If available, attach a diagram (organization chart) showing national coordination structure and linkages between ministries:


FINNISH NATIONAL COMMISSION ON SUSTAINABLE DEVELOPMENT
Chairman: Primeminister
Vice Chairman: Minister of the Environment
Other members: see below
SECRETARIAT GENERAL
within the Ministry of the Environment
SECRETARIAT
*Ministry of the Environment
*Other Ministries
SUBCOMMITTEE ON SOCIALLY SUSTAINABLE DEVELOPMENT
Working Group on Trade and Environment
Working Group on Biodiversity
Working Group on Climate
Working Group on International Forest Policies
SUBCOMMITTEE ON CHANGING PRODUCTION AND CONSUMPTION PATTERNS; FINANCING AND TRANSFER OF TECHNOLOGY
SUBCOMMITTEE ON EDUCATION AND TRAINING

Ministries:

Ministry for Foreign Affairs
Ministry of Justice
Ministry of the Interior
Ministry of Defence
Ministry of Finance
Ministry of Education
Ministry of Agriculture and Forestry
Ministry of Transport and Communications
Ministry of Trade and Industry
Ministry of Social Affairs and Health
Ministry of Employment
Ministry of the Environment

Government agencies:

Statistics Finland
Government Institute for Economic Research
National Board of Education
Finnish Game and Fisheries Research Institute
Metsähallitus - Forest and Park Service
The Finnish Forest Research Institute
Finnish Environment Institute

Academic sector:

Academy of Finland
(alternate member: Finland Futures Research Centre)

Business and productive sector:

Confederation of Finnish Industrial Employers
Central Association of Finnish Forest Industries Jaakko Pöyry Group
Central Union of Agricultural Producers and Forest Owners (MTK)

Interest groups:

Central Organization for Finnish Trade Unions
Teachers' Union
Confederation of Finnish Industrial Employers
Central Association of Finnish Forest Industries
Finnish Consumers' Association
Central Union of Agricultural Producers and Forest Owners (MTK)
Finnish Women's Organizations
(alternate: Union of Salaried Employees of Industry in Finland)

Non-governmental organizations:

Service Centre for Development Cooperation
Finnish Women's Organizations
Finnish Youth Cooperation Allianssi
Finnish Committee for UNICEF
Finnish Association for Nature Conservation
Greenpeace Finland
Sustainable Finland -project/ Friends of the Earth Finland
(alternate: Natur och Miljö (Swedish speaking population's NGO), Nature League)

Other:

Åland Provincial Government
Sami Parliament (the parliament of the indigenous Sami-people)
Association of Environmental Journalists

FINLAND

AGENDA 21 CHAPTER 2: **INTERNATIONAL COOPERATION TO ACCELERATE SUSTAINABLE DEVELOPMENT IN DEVELOPING COUNTRIES AND RELATED DOMESTIC POLICIES (with special emphasis on TRADE)**

NATIONAL PRIORITY

STATUS REPORT

Finland subscribes fully to the aims and principles of the United Nations Conference on Trade and Development, participating actively in the work of international organisations like WTO and the OECD on the integration of trade and environment policies. Trade and environment are among the five priority areas of the Finnish external economic policy. Finland also emphasizes the importance of the joint work programme at UNCTAD and UNEP, which Finland fully supports and it is expected that the outcome of this process will be useful in preparing for the Special Session of the General Assembly (1997) on the implementation of Agenda 21.

At the national level, there is a Special Committee (led by the Ministry for Foreign Affairs) which is preparing national positions for all important meetings. This Committee has also been responsible for the Finnish position, in principle, before the EU meetings, even though the final positions are approved in the EU-113 Committee.

FINLAND

Cross-Sectoral Issues

1. **Decision-making Structure:** The integration of trade and environmental policies is discussed in an Advisory Expert Working Group, where both governmental and non-governmental parties are represented. The group participates in the preparations of Finnish positions on issues included in the agendas of e.g. WTO, UNCTAD and the OECD.

2. **Capacity-Building/Technology Issues:** No information.

3. **Major Groups:** Non-governmental parties participate in the Advisory Group (see 1 above).

4. **Finance:** No specific extra financing.

5. **Regional/International Cooperation:** Supported by the other Nordic countries, with which Finland actively cooperates, Finland made a proposal that led to considering trade and environment issues permanently by the UNCTAD Trade and Development Board. Finland has participated constructively in the work of the OECD Joint Session of Trade and Environment Experts, which is carrying out an ambitious work programme under the mandate given by the OECD Council, at the Ministerial level. Finland is chairing the environmental part of the Joint Session. In Finland, appropriate measures will be taken to implement the OECD Guidelines nationally. Finland participates in the work of the WTD-CTE and has also been very active in this field within the EU.

STATISTICAL DATA/INDICATORS					

AGENDA 21 CHAPTER 3: COMBATING POVERTY

NATIONAL PRIORITY	Poverty is not a national priority. Unemployment is a major concern.

STATUS REPORT:

Focus of national strategy

The unemployment rate in Finland has been exceptionally high for the past few years, around 15 %, which has led to a substantial reduction of living standards in some sectors of the society. Social, educational and labour policy measures have been taken to redress the problem. The access to primary health care, clean water and sanitation, and primary education has been, and still is excellent. The unemployment situation continues to be serious. However, the Government has committed itself to halve the unemployment rate by the end of the century. This will be the most demanding objective of the Government policy.

The particular problem is the long-term unemployment of the ageing employees. Changes in the unemployment security system may increase the poverty rate and enlarge the gap between the rich and the poor in Finland.

In Finland, the greatest part of income security for citizens is arranged in the form of general, statutory insurance. Health care, hospital care, social care services and welfare for children, the elderly and the disabled as well as opportunities for education are equally available for all social groups in all parts of the country. All citizens are guaranteed basic social security. This is an effective way of combatting and preventing widespread poverty and social exclusion. Good quality day-care for children is widely available. Both sexes and language groups have the same rights to education, social protection and public services. The last-resort living-allowance is granted on the basis of individual means-testing when a person or family cannot get sufficient income in another way. Among the gainfully employed, poverty measured in terms of income is very rare.

The State and Municipalities are jointly responsible for arranging the universal social and health services, backed up by the stipulations of the constitution and sectoral legislation. Sufficient social and health care services and income-security are ensured.

The importance of labour administration has increased. Decision-making power in the labour administration has been delegated to the regional and particularly to the local level, making it possible to take better into account the special features of the different regions and client groups. Unemployment rates have decreased and stabilized, as well as persistent long-term unemployment spells. With the high level of unemployment, the risk of poverty passing to the next generation in the family exists.

Teh relative poverty rate declined in the 1980's both in terms of income and consumption. In 1994, poor households were only 2.6 % of all households (as measured in terms of disposable income per household consumption unit not over half of the median income. There have been no great changes in their number during the recession.

The deep recession has strongly increased the number of the recipients of the last-resort income security. In 1990, living allowances were paid to 63 persons/1,000 inhabitants, and in 1994, to 113/1,000, i.e to 12.3 % of the households.

More than half of the recipients are unemployed, lack of work being the main reason for poverty. The clients are younger than before. Single persons and single-parent households are over-represented. The typical recipient is a single man.

While unemployment has struck both sexes equally severely, 70% of all women are gainfully employed (1995). Thus poverty has not been feminized in Finland. The share of pensioner households among the poor has stayed very low.

Disability is not a significant risk factor. The welfare and rights of minorities (the Sami people, the Romany people) are protected. Having several children and being a single parent are still risk factors.

The phenomenon of urban poverty has reappeared threatening to increase detrimental poverty cultures and exclusion. Welfare dependancy has increased, as well as the proportion of population receiving benefits in the largest cities.

Spatial accumulation of poverty and deprivation in suburbs is not widespread due to the mixed composition of housing (ownerhsip, low and high-rise houses) and population groups living in the area. Employment, urban planning and building together with educational, cultural (schools and libraries) and social amenities are instrumental in preventing social vicious circles, segregation and labeling of suburbs.

The extent of homelessness has been reduced by 50 % in the last ten years, still being at 10,000 single persons and some hundreds of families.

POVERTY: Highlight activities

Universal social protection, child day care, employment-creating measures and educational opportunities are barriers against social exclusion and instruments for integration. In Finland, the problem of poverty does not require a separate national plan of action. The poverty problem can be taken care of through the strategies of the different sectors' policies as part of their normal activities.

The cornerstones of the Finnish welfare system are the social protection and education systems. Labour policy is closely connected with the public service system.

The central principle is equal treatment of citizens and gender equality. On a global scale, one can hardly speak of extreme poverty in Finland.

The central strategy-level objective of the Finnish labour policy during the past few years has been to reduce long-term unemployment and to alleviate social exclusion. Measures in labour policy have been increased strongly. The increase in long-term unemployment, which has continued for several years, has indeed been stopped, and the decline will probably continue during the next few years.

As part of the implementation of the strategy each labour district has prepared a regional programme. Efforts have been made to encourage municipalities, other authorities and organisations to commit themselves to these programmes.

The aim in preventive social and health policy is to support activities which can affect the processes that cause social exclusion. The most important target groups are the long-term unemployed people and other risk groups, like vulnerable children, those who suffer mental health problems and substance abusers. The need for new approaches in social work has become more and more evident.

The unemployment security system has been reformed in order to eliminate the so-called poverty traps. The central aim with both of these reforms is to change the benefits so that working could in all circumstances be a better alternative than living on social benefits. Legislation has been modified to prevent exclusion from working life by enhancing rehabilitation that maintains working capacity.

Measures and policies have been developed in order to eliminate poverty among the disabled and to provide them with equal opportunities. In 1995, a long-term plan of action on disability policy was drafted, based on the standard rules approved by the UN in 1993.

Differences in health between population groups are linked to the risk of social polarization. The starting point in the Finnish health policy is the WHO strategy "Health for All by the Year 2000", accordingly paying special attention to services needed by risk groups.

According to the employment programme, vocational training of young people will be extended so that all young people without vocational skills could be offered a place to study at secondary level education. The aim is to create an education guarantee system which would offer an opportunity for further studies to all young people who have completed the compulsory education. In the information society, the exclusion caused by polarisation with regard to knowledge can be reduced by supporting a citizen's information society.

A part of the labour policy measures is directed at organisations founded by the unemployed themselves, and at various training and employment projects.

Financing from the EU Social Fund has been used to complement the national labour policy.

In 1996, a group of experts in the Ministry of Social Affairs and Health studied the recent development of poverty and social exclusion in Finland. The work is linked to the UN International Year for the Eradication of Poverty 1996. Also, several social and public health non-governmental organisations are active in this field, many involved in international cooperation and development cooperation.

Cross-Sectoral Issues

1. **Decision-making Structure:** Legislation related to the issue of poverty is covered by the Social Welfare Act and the Statute on Social Welfare both of which have been reviewed since Rio. The State andMunicipalities are jointly responsible for arranging the universal social and health services. The municipal boards widely cooperate with specialized voluntary organisations. The importance of labour administration has increased with the sharp rise in unemployment. In the past few years, decision-making power in the labour administration has been delegated to the regional and particularly to the local level, making it possible to take better into account the special features of the different regions and client groups better.

2. **Capacity-Building/Technology Issues:** No information.

3. **Major Groups:** The major group receiving public assistance is the unemployed. Clients have the opportunity to participate in and influence the planning and execution of social welfare and the assistance provided through social welfare units.

4. **Finance:** Threatening income differences due to persistent unemployment have been controlled through unemployment insurance schemes. Provision of social welfare in communities is subsidized by the State.
Due to continuous sizable budgetary deficits, the ODA appropriations for 1994 approved by the Parliament were 12.4 per cent lower than in 1993. The membership in the European Union binds Finland to participate in the financing of the EU development cooperation through EU's statutory budget and the European Development Fund.
Finland is a member of the major international financial institutions, regarding them as central sources of finance for development, policy advice and coordination of assistance to developing countries.

5. **Regional/International Cooperation:**
NB: Developed countries, where domestic poverty alleviation is not a major concern may wish to briefly describe their position regarding global poverty alleviation.

One of the main objectives of Finnish development cooperation is the reduction of widespread poverty in developing countries. The Finnish Development Cooperation Strategy is clearly based on the principle of sustainable development. Finland's policy is based on the understanding that reduction of poverty in any meaningful way is not possible unless the economies of the societies concerned grow faster than the population. Without an enabling environment, investment in human capital, and empowerment of the poor, development aid will be international social welfare without any sustainable impact on the alleviation of poverty.
Special attention has been paid to the role of women in the empowerment of the poor. For further information related to Finland's development cooperation, see Chapter 33.

STATISTICAL DATA/INDICATORS

	1985	1990	1992	Latest 1996	
Unemployment (%)	5.0	3.5	13.5	17%	
Population living in absolute poverty	NA	NA	NA		
Public spending on social sector %					
Other data: National poverty level (% of population). Finland defines poor people as having an income below 50% of the median income, per OECD Consumption Unit. (Data from National reports for 1990 and 1994).	4.9 (1981)	2.5	2.5 (1993)	2.6 (1994)	

AGENDA 21 CHAPTER 4: CHANGING CONSUMPTION PATTERNS

NATIONAL PRIORITY: **HIGH**

STATUS REPORT:

- **National policy objectives/focus**

Consumers now have greater confidence than before in their ability to influence producers and suppliers in environmental matters, for example by using products within the Nordic Eco-Labelling System. Within the issue of changing consumption patterns, the following activities have been completed: national seminars/debates involving society at large, national awareness programmes on consumption/production and its consequences, media activities and new legislation encouraging waste reduction. The following activities have been initiated: national and sectoral reviews of consumption and production patterns to identify waste and the possibility for waste reduction, as well as steps to reduce energy consumption.
The Finnish Society for Nature and Environment has several projects focusing on changes in lifestyle patterns, "green consumerism" and how to achieve a sustainable society.
Finland has undertaken several studies dealing with attitudinal prerequisites and constraints of environmentally sound behaviour, e.g. Attitudes and Ecologically Responsible Consumption and the National Environmental Policy Programme 2005.
Several seminars and other meetings both at the national and at the Nordic level have been arranged discussing these issues and themes.
We have specific programmes in traffic, energy saving, natural (organic) production etc. The Report on Production - Products - Consumption as part of the preparation for the Government Programme of Action for Sustainable Development will be completed by 15 November 1996.

See also Chapters 7 and 30.

- **National targets**

Cross-Sectoral Issues

1. **Decision-making Structure:** The central institutions focusing on consumption are the following: the Advisory Council on Consumers' Affairs, the Ministry of Justice, and the Ministry of Trade and Industry, and within it, various institutions, e.g. the National Consumers Association. In its consumer information campaigns and seminars, both at national and local levels, the Association promotes a functioning recycling system, minimization of unnecessary consumption and the lengthening of the durability and life-cycle of goods in order to reduce the amount of waste. The target group of the National Consumers Association is an active, quality- and price-conscious consumer who can act in an intelligent manner with regard to his/her own economy and the environment.

2. **Capacity-Building:** Studies and information campaigns.

3. **Major Groups:** See "Status Report" above.

4. **Finance:** No information.

5. **Regional/International Cooperation:** Finland participates in the work of the Nordic Council of Ministers, OECD, UNEP, CSD and the EU´s 5th Environmental Programme in this field.

STATISTICAL DATA/INDICATORS

	1985	1990	1992	Latest 199_	
GDP per capita (current US$)	11,026	27,608	21,756		
Real GDP growth (%)	3.4	0.0	- 3.8		
Annual energy consumption per capita (Kg. of oil equivalent per capita)	4,753	4,814	4,597		
Motor vehicles in use per 1000 inhabitants					
Other data					

Government policies affecting consumption and production.

1. Goals and Agents (Stakeholders)

Indicate with a (X) those agents which your Governments policies are meant most to influence.

Agents / Goals	Producers	Local authorities	Central Government	Households	Civil society
Material efficiency	X	X		X	X
Energy efficiency:					
Transport	X	X	X		X
Housing	X	X	X	X	X
Other	X	-	-	X	
Waste:					
Reduce	X	X	X	X	X
Reuse	X	X	X	X	X
Recycle	X	X	X	X	X

Comments:

2. Means & Measures and Agents (Stakeholders)
Indicate with an (R) those agents who assume primary responsibility for any of the policy measures indicated; indicate with an (I) the agents for which the impact is expected to be especially significant.

Means & Measures / Agents	Producers	Local authorities	Central Government	House-holds	Civil Society
Improving understanding and analysis					
Information and education (e.g., radio/TV/press)	I	I	I		I
Research	I		R		I
Evaluating environmental claims	I	R	R	I	I
Form partnerships	I	R	R		I
Applying tools for modifying behaviour					
Community based strategies		R		I	I
Social incentives/disincentives (e.g., ecolabelling)	R		I	I	
Regulatory instruments	I		R	I	
Economic incentives/disincentives	I		R	I	
Voluntary agreements of producer responsibility for aspects of product life cycle	R/I		R	I	
Provision of enabling facilities and infrastructure (e.g., transportation alternatives, recycling)	I	R		I	
Procurement policy	I	R	R	I	
Monitoring, evaluating and reviewing performance					
Action campaign		R		I	R/I
Other (specify)					I

Comments:

AGENDA 21 CHAPTER 5: DEMOGRAPHIC DYNAMICS AND SUSTAINABILITY

NATIONAL PRIORITY: Not a national problem ☐

STATUS REPORT: There is not yet a national policy on demographic dynamics and sustainability in Finland. There has been a national debate on the linkages between population and environmental issues both at the Parliament and Government levels. Women and the media have been included in the public debate. At the community level, seminars have been held on the issue.
The general trend in the structure of the Finnish population over the past few decades has been typical to a European industrialized country. The proportion of the economically active population has increased, a characteristic Nordic feature being the high share of women in the labour force.
Finland has undergone a profound social and economic transformation towards an increasingly urban society with smaller family units. Extensive social security programmes have helped families to combine working and family lives.

Among the major challenges that Finland now faces are wide and persistant unemployment; the ageing of the population; as well as securing equal opportunities and services universally for all social groups throughout the country. In the Finnish population approach, a general welfare policy combined with an active family policy has contributed to a balanced population development. As a consequence of the decline in the fertility rate and longer life-expectancy, the population is ageing. The aim of the social policy is to provide the elderly with care and housing services which promote independence, and enable them to maintain their social contacts for as long as possible.

☐ Check the appropriate boxes below: No information.

• Governments view on population growth	☐ Too high	☐ Too low	☐ Satisfactory	☐
• Governments view on fertility level	☐ Too high	☐ Too low	☐ Satisfactory	☐
	To lower the rate	**To maintain status quo**	**To raise the rate**	☐
• Governments intervention on population growth	☐	☐	☐	☐
• Governments view on intervention on fertility level	☐	☐	☐	☐

Cross-Sectoral Issues

1. **Decision-making Structure:** The Ministry of Social Affairs and Health is the body most directly concerned with demographic issues.

2. **Capacity-Building/Technology Issues:** No information.

3. **Major Groups:** No information.

4. **Finance:** No information.

5. **Regional/International Cooperation:** HEDEC (the Health and Social Development Group) is a unit for foreign assistance providing expertise and information services pertaining to health and social welfare and to population issues. The objectives of the Finnish development cooperation policy are closely interlinked with population issues, especially population growth, which Finland will continue to tackle primarily through promotion of sustainable economic and social development, human rights and the status of women in developing countries. Special efforts will be made to increase aid to population programs, especially those promoting reproductive health, including family planning, in response to the vast unmet demand in developing countries.

STATISTICAL DATA/INDICATORS

	1990	1993	Latest 199_	
Population (Thousands) mid-year estimates	4,986	5,067		
Annual rate of increase (1990-1993)	0.5			
Surface area (Km^2)	338,145			
Population density (people/Km^2)	14.7	15		
Other data				

AGENDA 21 CHAPTER 6: PROTECTING AND PROMOTING HUMAN HEALTH

NATIONAL PRIORITY:	No information	

STATUS REPORT: Access to primary health care, clean water and sanitation in Finland is excellent.

The implementation of the revised national "Health for All by the Year 2000" Programme (revised in 1992) recognizes seven fields of action: decreasing health differences among population groups, maintaining and enhancing the functional capacity of the population, promoting intersectoral cooperation in support of a preventive health policy, improving the cost-effectiveness of the health services, development of the capacities of the health personnel, management in health care, and citizen participation. A leading principle is the increase in cost-efficiency. A network of municipal health centres provides primary services equally in all parts of the country. In rural areas, the capacity of municipal health centres is greater than in cities, where complementary private services exist. The ongoing work to maintain high vaccination coverage has been successful; a major part of the UN targets and programmes on communicable diseases has been reached and is no longer relevant to Finland.

Promotion of parenthood and the welfare of the child population is a major aim of Finnish welfare policy. Finland developed a Plan of Action for implementing the World Summit Declaration on the Survival, Protection and Development of Children and Plan of Action made in 1990.

A decrease in the consumption of tobacco and related health hazards has been an important issue in the Finnish health policy. Smoking has decreased, new anti-smoking legislation being instrumental in creating smoke-free working environments. Smoking is, however, alarmingly high among young people. There have also been campaigns to promote individual control of drinking, focusing on the young.

The economic recession in Finland has led to adjustments in health and social fields. Meeting the needs of the unemployed is an increasingly important task for health and social services as well as voluntary organizations. The economic recession has also affected white-collar groups and executives, widening the scale of social and health problems.

Recent Finnish discussion has recognized new environmental hazards and risks to human health, such as depletion of the Northern ozone layer, global warming and urban pollutants and microparticles.

It is also widely accepted that preventive measures should be used in a larger scale. The Finnish Constitution includes the right to a healthy environment, marking the importance given to the issue.

Human health and welfare is best protected at work and in living environments. The quality of housing, residential environments and the level of social integration are interlinked. The need for employment, income security and improvements to community facilities goes hand in hand with the need for improvements to the physical quality of the local environments. Health promotion and preventive social policy aim at early warning and pre-emptive measures to combat exclusion and accumulated disadvantage at the local level. Environmental impact analysis (health impact assesment, social impact analysis) methods are being improved and employed by local authorities.

The Finnish National "Health for All by the Year 2000" Programme as well as the national preventive social and health policy have started several innovative local, multi-sectoral sub-projects to provide information on new approaches to welfare promotion.

The Government report on national health conditions has been discussed by the Parliament and the report on the state of social protection was submitted in 1996.

A national plan of action on environmental health has been processed aiming at the targets of the European Environmental Health Programme. An official Board has been established on genetic technology.

The new act on health protection aims at preventing, diminishing and eradicating risk-factors detrimental to health in the living environment. Implementation has been delegated to the local authorities. Special emphasis has been given to safeguarding swimming and drinking water.

A special agency to monitor compliance to legal stipulations on chemicals was established in 1994.

Specific actions have been taken to identify health-detrimental factors of residential buildings (micro-organisms, air quality, pollutants).

There is a special campaign to combat domestic accidents.

Cross-Sectoral Issues

1. **Decision-making Structure:** The Department for Environmental Health Research in the National Public Health Institute has grown to a high-level expertise unit on problems of national as well as local concern.
The new Planning and State Subsidies Act provides a mechanism for better cooperation between social and health services at the municipal level. The Act gives local authorities increased responsibility and freedom in health policy. The Act on Patient's Rights, concerning treatment and services for patients in health care, entered into force in March 1993. Finnish legislation provides for children's rights in accordance with the UN Convention on the Rights of the Child. New legislation and resources in the environmental sector have benefitted environmental health. For instance, progress in the protection of air and freshwater as well as in waste management has decreased health risks. Legislation on health protection, chemical safety, food safety and radiation protection are, or will be, revised in accordance with the legislation of the European Union.

2. **Capacity-Building/Technology Issues:** No information.

3. **Major Groups:** Children's rights (see 1 above)

4. **Finance:** No information.

5. **Regional/International Cooperation:** In 1990, a special unit was formed to promote development cooperation in health and social welfare. The National Institute for Occupational Health contributes to the building of occupational health service systems in developing countries. It works as a collaborating center of WHO/EURO to give international support to accidental environmental health problems. It also contributes to the building of an European geographical environmental health information system. Finland has given material and expertise support to the Baltic countries and regions of the Russian Federation in dealing with communicable diseases as well as nuclear and chemical risks.

STATISTICAL DATA/INDICATORS

	1980	1990	Latest 1994
Life expectancy at birth Male Female		 70.7 78.8	 76* (M+F)
Infant mortality (per 1000 live births up to age 12 months)		5.9	4*
Maternal mortality rate (per 100000 live births) (1980-92)		11*	
Access to safe drinking water (% of population)			
Access to sanitation services (% of population)			

Other data: The trends in health indicators have been mainly favourable. Life expectancy at birth during the 1986-1990 period was 70.7 years for males and 78.8 years for females. The life expectancy of males increased by 0.7 years from the previous five-year period and that of females by 0.3 years. The infant mortality rate has for several years been one of the lowest in the world (5.9 per thousand in 1991).

AGENDA 21 CHAPTER 7: PROMOTING SUSTAINABLE HUMAN SETTLEMENT DEVELOPMENT

NATIONAL PRIORITY

STATUS REPORT

Since 1992, great efforts have been made in Finland to operationalize the notion of sustainable human settlements development and to develop tools for attaining this goal. The concept has been a topic of a number of research activities. Both "basic" research and practice-oriented applied research have been carried out, such as studies on the environmental and economic implications of various land use patterns conducted by the Technical Research Centre of Finland (VTT). Thanks to these studies, the priority issues have been clarified.

Sustainable human settlements development has been included in a number of policy papers. The following papers, for instance, are focussed on human settlements:

* The Action Programme on Reducing the Adverse Effects of Transport to the Environment by the Ministry of Transport and Communications (1994);
* "A Look at the Cities", the recommendations of the Ministry of the Environment's (MOE) Urban Policy Task Force (1995);
* "Sustainability as a Challenge", Finland's national report for UN's Habitat II Conference (May 1996);
* "Cities as Engines of Growth", report of the Government Task Force set up to prepare proposals for the development of urban areas (June 1996);
* National plan of action on environmental health (currently under preparation);
* Government programme of action for sustainable development, including a sub-programme on human settlements and transport as one of its four components (currently under preparation).

Policy instruments have also been improved:

* EIA was included in the spatial planning stipulations of the Building Act (sectoral law guiding all land use planning and construction) in 1994. The ongoing review of the Act is expected to further strengthen its environmental aspects.
* Environmental aspects have been incorporated into master planning through guidelines and training, and efforts are being made to develop "strategic" master planning which would integrate it into other tools of urban management, including environmental management.
* Many local authorities have prepared or are preparing Local Agendas 21. See also Chapter 28.
* Human settlements-related indicators are included in the ongoing project on sustainable development indicators which the MOE implements jointly with several Ministries and the Central Statistical Office.

Specific actions have been taken, including:

* Studies on the impact of the location of commercial services (large shopping entres, hypermarkets, etc.) and a proposal on instruments to guide their location are under preparation;
* Financial and other support to renovation and improvement of housing;
* A special Renovation Programme aimed at lengthening the life span of the existing housing stock and improving its energy efficiency and waste disposal systems;
* Projects aimed at integrated improvement of neighbourhood units;
* Projects aimed at promoting development of urban centres implemented by MOE, local authorities and the private sector;
* A number of pilot projects and architectural competitions on ecologically sound planning and construction; and
* Local actions aimed at reducing the amounts of solid wastes and improving the disposal systems, involving awareness-raising and education campaigns, recovery and recycling, separation and/or composting of household wastes at source, even in multi-storey buildings.

Cross-Sectoral Issues

1. Decision-making Structure:

Closer linkages have been set up between the authorities responsible for natural environment and the authorities in charge of built environment. This development has taken place throughout the environmental administration: MOE, the Finnish Environment Institute, regional environment centres, and municipalities.

2. Capacity Building, Technology issues:

* A programme aimed at developing and commercializing environmentally sound construction products has been implemented by the Technology Development Centre (TEKES) since 1994.
* Experimentation of double water supply system and separation of "grey waters" in double sewerage networks has been initiated with the support by the MOE.
* The Ministry of Trade and Industries has continued the implementation of several programmes aimed at developing innovative energy supply solutions and promoting energy conservation (see Chapter 9).
* Awareness-raising campaigns, education and training are also carried out by many institutes, such as technical universities. The amount of relevant literature available in Finnish is increasing.

3. Finance

* Housing finance systems and other instruments have been developed with a view to creating an enabling policy environment for systematic maintenance and renovation of the housing stock.
* Financing instruments are also being developed as incentives to preventing further urban sprawl and to creating a barrier-free living environment for an ageing population.

4. International activities

* Finland paid great attention to the preparations of the Habitat II Conference. Most of these efforts were made through EU, but Finland could also make an impact beyond that: Finland's representative acted as Chair of the Preparatory Committee and Committee II at the Conference, and Finland represented the Western European and Others Group (WEOG) countries in the core group responsible for drafting the final document, **Habitat Agenda**. Throughout the process, Finland emphasized the environmental aspects of human settlements development.
* Finland also participates actively in human settlements -related cooperation in the Baltic Sea region, which takes place at all levels of the Government and involves all sectors of the society. Municipalities support, e.g. through twinning or other arrangements, their counterparts in Russia and Baltic countries in municipal management and improvement of environmental infrastructure. MOE, together with other agencies, provides funding for similar activities which usually include capacity-building measures.
* Finland has contributed to various international R&D projects on sustainable human settlements development executed by organizations, such as EU and OECD or by networks of municipalities.
* A number of relevant activities are also implemented through Finnish aid in developing countries. Examples of such programmes and projects are an extensive water supply programme in Hanoi and Haiphong, Viet Nam; a water supply and sanitation programme in Western Kenya; a comprehensive urban development programme in Nacala, Mozambique; and a comprehensive social development programme in Region V, Nicaragua. In all these actions environmental, social and economic problems are addressed in an integrated way.

STATISTICAL DATA/INDICATORS

	1990	1995	
Urban population in % of total population	61.6	64.6	
Annual rate of growth of urban population (%)	0.9	1.0	
Largest city population (in % of total population)	9.8	10.3	
Other data			

AGENDA 21 CHAPTER 8: INTEGRATING ENVIRONMENT AND DEVELOPMENT IN DECISION-MAKING

(See pages vii and viii at the beginning of the profile)

NATIONAL PRIORITY:

STATUS REPORT: The Act on Environmental Impact Assessment Procedure came into force in Finland in September 1994. Nowadays, in some fields, such as road planning, environmental impact assessment is already becoming an integral part of the planning process. Finland is also committed to certain international agreements concerning environmental impact assessment. As a member of the EU, Finland must comply with the Council Directive on Assessment of the Effects of Certain Public and Private Projects on Environment (85/377/EEC) which came into force in 1988. Finland has also signed the UN/ECE Convention on Environmental Impact Assessment in a Transboundary Context. Certain projects always require an environmental impact assessment procedure. These include oil refineries, nuclear power plants, pulp, paper and board mills, large harbour projects, motorways, airports intended for heavy traffic, major hazardous waste disposal facilities and projects which will permanently alter wide areas of forest, bog or wetlands. An environmental impact assessment procedure can also be applied in individual cases to a specific project or to an already completed project which will essentially change. The environmental impact assessment procedure is connected with permit-granting and similar processes under twelve Acts: the Building Act; Water Act; Environmental Permit Procedures Act; Chemicals Act; Land Extraction Act; Mining Act; Electricity Act; Public Roads Act; Aviation Act; Act on the Redemption of Immovable Property and Special Rights; Act on Privately-owned Forests and the Forest Improvement Act - and Amendments have been made thereto. Municipalities have to investigate to an appropriate extent the environmental impact of physical planning according to the Building Act.

The EIA Act also includes a general investigation obligation for policies, plans and programmes which may have a significant environmental impact once implemented. These policies include, i.a. tax-, payment-, energy-, transport-, agriculture- and industry policies. The Council of State may issue general guidelines on environmental impact assessment in the case of policies, plans and programmes. These guidelines are currently under preparation by the Ministry of the Environment and the Finnish Environment Institute.

Finland has been working actively since autumn 1994 to produce a set of guidelines for assessing the impact on the Arctic environment under the Arctic Environmental Protection Strategy (AEPS). Finland is also working with the other Nordic countries to ensure that the Murmansk/Barents Sea area is made one of the model regions in the World Bank Environmental Management Technical Assistance Programme for Russia.

AGENDA 21 CHAPTER 8 cont'd.

The Finnish National Commission on Sustainable Development (FNCSD) was established in June 1993 to promote and coordinate the sustainable development actions in accordance with the decisions taken in Rio. For instance, it has set up a Finnish Sustainable Development Indicators Network Project to plan and implement the testing of CSD indicators for national use and to arrange and integrate the tasks and duties of different administrative offices. (See also the "Overview" and Chapter 40.)
"Finnish Action for Sustainable Development", a summary of various measures including sectoral strategies to promote sustainable development in 1995-1997, was published by the FNCSD in January 1995 and translated into English in March 1995. In the same year, the Ministry of the Environment also published The National Environmental Policy Programme 2005. A Government Action Programme on Sustainable Development is currently under preparation. It will concentrate on core sectors of sustainable development: human settlements development and transport; rural development; production, products and consumption, and energy, on the most important issues of environmental protection and nature conservation as well as the use of economic instruments and Finland's role in the international cooperation. In addition, the programme will identify research needs focusing on multidisciplinary and multisectoral aspects. The aim of the programme is to move towards sustainability through implementing jointly agreed outlines for action taking into account all aspects of SD. The programme will also pave the way for long-term strategic planning. Major groups are included in the preparation through hearings and seminars. The drafting is done by ministries responsible for the chosen sectors.

Cross-Sectoral Issues

1. **Decision-making Structure:** See Status Report, Overview pages v-viii and Chapter 40.

2. **Capacity-Building/Technology Issues:** See Status Report.

3. **Major Groups:** See Chapter 27 (27.7).

4. **Finance:** No specific information.

5. **Regional/International Cooperation:**
   * Nordic Council of Ministers
   * Arctic Council/ Arctic Environmental Protection Strategy
   * Barents Euro-Arctic Council
   * Helsinki Commission
   * Baltic Agenda 21 (years 1996-1998)
   * EU 5th Environment Programme
   * CSD/UN

AGENDA 21 CHAPTER 9: PROTECTION OF THE ATMOSPHERE

NATIONAL PRIORITY: High

STATUS REPORT:

The Montreal Protocol and its Amendments

- Montreal Protocol (1987) ratified in 1988
- London Amendment (1990) ratified in 1991
- Copenhagen Amendment (1992) ratified in 1993
- The latest report(s) to the Montreal Protocol Secretariat were prepared in 1996.

United Nations Framework Convention on Climate Change

- UNFCCC was ratified in 1994.
- The latest report to the UNFCCC Secretariat was submitted in 1995.

Additional comments relevant to this chapter

Montreal Protocol has been implemented in Finland by the EU Regulation 3093/93 on ozone depleting substances and by the Council of State decisions. Finland has reduced and phased out the consumption of ozone depleting substances earlier than stipulated in the Montreal Protocol. Finland has also been active in the field of scientific research related to the depletion of the ozone layer. Finland's emissions of greenhouse gases (GHGs) constitute some 0.3% of the total global emissions. The most notable greenhouse gases in Finland are carbon dioxide emissions, which account for some 82% of the total emissions. Other greenhouse gases are nitrogen oxides, methane and nitrous oxide.

The Inter-ministerial National Commission on Climate Change is currently preparing a Council of State's decision-in-principle on the objectives and guidelines for action of the GHGs in Finland for the years 2005, 2010, and 2020. The assignment follows the Berlin Mandate negotiations. In the 1980s, the CO_2 emissions decreased significantly in Finland due to the increased use of nuclear power, bioenergy and natural gas, and due to the import of electricity. In the 1990s, the CO_2 emissions from fossil fuels showed a significant increase again. According to the estimates, the carbon dioxide emissions will grow about 70 million tonnes by the year 2010. In the comparision year, 1990, the corresponding projection figure should have been 60 million tonnes.

Finland has a cold climate with corresponding heating needs. The considerable energy-intensive industry is largely based on forests, which cover more than two-thirds of the country. Nuclear and hydro power is used for 50-60% of the electricity generation. Biomass utilization, constituting 15% of the energy balance, is the highest among the OECD countries, and non-fossil fuels in total represent about 35% of the energy balance.

Finland has successfully introduced energy efficient technologies such as district heating, which cover 45% of the heat supply, and combined heat and power (CHP), which currently supplies 30% of the electricity. Finland was the first country to apply a CO_2 tax, currently equivalent to about US$ 8.50 per tonne of CO_2.

AGENDA 21 CHAPTER 9 cont'd.

The international conventions signed by Finland call for considerable decreases in various emissions into the air by the energy industry during the 1990s. In the international sulphur protocol signed in 1985, Finland committed itself to reducing its sulphur emissions by 30% from the 1980 level (584,000 tonnes) by 1993. By 1992, emissions had already been reduced by over 70%. This was achieved by changes in the structure of energy production, the reduced use of heavy fuel oil, the fall in the sulphur content of fuels together with improvements in process technology.

In addition, in 1991, the Government decided to draw up a ten-year programme aimed at reducing sulphur emissions by 80% from the 1980 level. Finland committed itself to the same goal by signing the second sulphur protocol in Oslo in 1994. The target was achieved in 1994, and a further reduction was recorded in 1995.

As regards nitrogen oxides, Finland committed itself under the Sofia Protocol, signed in 1988, to stabilize emissions to the 1987 level (288,000 tonnes) by the year 1994. Finland also stated that it would cut emissions of nitrogen oxides by 30% from the 1980 level by 1998. By 1995, the nitrogen oxide emissions from energy production had fallen by 26% from 1980, even though energy consumption had at the same time increased 46%. However, the emissions caused by traffic increased constantly until 1991, and started to decrease only after that.

Of the total emissions in Finland, traffic accounts for 25% of the carbon dioxide, 60% of the nitrogen oxides, 50% of the hydrocarbon, 75% of the carbon monoxide, and 5% of the sulphur dioxide. The upper limits on the emissions from vehicles have been made considerably stricter in the 1990s in order to reduce the pollution caused by road traffic. However, car emissions are controlled more extensively in Finland than in any other EU country by statutory annual car tests. The air quality is nowadays less frequently violated by traffic. Thanks to the improvements in fuels, carbon monoxide emissions seldom exceed the limits. Within the EU, the emission limits will be even stricter in the near future in view of the technical advances being made.

AGENDA 21 CHAPTER 9 cont'd.

CROSS-SECTORAL ISSUES

1. Decision-making: The following are in charge of protection of the atmosphere:
- Ministry of the Environment;
- Finnish National Commission on Climate Change;
- Finnish National Commission on Sustainable Development.

Legislation to protect the atmosphere has been reviewed and revised since UNCED. The revision on the Air Pollution Control Act entered into force in 1996.

2. Capacity-building/Technology Issues: The national early detection system, the capacity to predict changes and fluctuations and capacity building and training to perform observations and assessments are rated "good". In the area of transboundary atmospheric pollution control, the Government provides training opportunities. Research capacity on transboundary atmospheric pollution is rated "good", capacity for observation/assessment and information exchange is rated "very good".

In order to develop safe technologies, the Ministry of Trade and the Environment has launched eleven new energy technology development programmes for 1993-1998. The programmes focus on non-nuclear energy options, renewable energy sources, energy conservation, greater industrial efficiency and ways of reducing harmful environmental effects of the energy economy.

3. Major Groups: NGOs, the private sector and local authorities have participated in activities under all programme areas of this chapter.

4. Finance: For 1992-1995, US$ 4.1 million have been contributed to the Vienna/Montreal Trust Funds and the Interim Multilateral Ozone Fund. In 1989, US$ 2.4 million were contributed to UNEP and UNDP to support developing countries in their activities to protect the ozone layer.

5. International cooperation: Finland participates in the Preparatory Committee of the Regional Conference on Transport and the Environment to be held in 1996. In 1994, the UN Framework Convention on Climate Change was ratified. The London Amendment to the Montreal Protocol was adopted in 1991, and the Copenhagen Amendment in 1993. Finland participates in the European Trace Experiment (ETEX) with WMO and EU. Finland signed the Air Pollution Control Agreement with Estonia (2 July 1993) and the Agreement on Cooperation in the Field of Environmental Protection with the Russian Federation (29 April 1992). Finland has also signed the Convention on Long Range Transboundary Air Pollution and contributes to the Nordic Environmental Strategy (1996), and to the EU activities in this field.

AGENDA 21 CHAPTER 9 cont'd.

STATISTICAL DATA/INDICATORS				
	1980	**1990**	**Latest 1994**	
CO_2 emissions (eq. million tons) (Energy related)	54	53	57	
SO_x (Kilo tons)	584	260	117	
NO_x (Kilo tons)	295	300	283	
CH_4 (Kilo tons)		252	248	
Consumption of Ozone Depleting Substances (ODP Tons)	3300 (**1986**)	2615	606	
Expenditure on air pollution abatement in US$ equivalents (million) (FIM (Million) 1188.2. Exchange rate 1990 US$ = 3.82FIM)		311		
Other data: Finland participates with 3 observation stations (1990:2) in the Global Ozone Observing System. Relative contribution of national greenhouse gases 1990: CO_2: 73%; CH_4: 7%; N_2O: 9%; CFC: 11%.				

AGENDA 21 CHAPTER 10: INTEGRATED APPROACH TO THE PLANNING AND MANAGEMENT OF LAND RESOURCES

NATIONAL PRIORITY:

STATUS REPORT: MANAGEMENT OF LAND RESOURCES

Current priorities for the development of the land use planning system at the national level include, inter alia, the reform of the Building Act, the preparation of national spatial planning perspectives, integrating spatial planning and nature conservation, and developing tools to integrate land use planning and other tools of urban management.

One of the most important challenges for land use planning is urban sprawl (see Chapter 7) and an ever increasing number of secondary homes built on the shoreline. Legal reforms have been under preparation for several years to address these politically difficult issues. Key laws in this respect are the Building Act and the Nature Conservation Act. A task force was set up again in 1996 in order to review the reform of the Building Act, while a bill for the Conservation Act has been submitted to the Parliament.

In the meantime, several important amendments have already been made. Sustainable development was incorporated as a concept into the Building Act as early as 1990. After that, the goal of making sustainable development operational in spatial planning has been firmly set on the political agenda. Already now all plans are assessed in terms of their impact on nature protection, water and waste management, and air protection, for example. The EIA has gradually been integrated into land use planning. The principles of ecological land use have also been clarified through planning competitions and experimental development projects. (See Chapter 7.)

The Ministry of the Environment has prepared a plan, "Finland 2017: a national vision of the spatial structure and land use", for the time frame of 20 to 30 years. Likewise, the National Environmental Policy Programme 2005 (MOE, 1995) includes measures aimed at ensuring environmentally sound land use, such as pilot projects, information dissemination, financial instruments and new forms of partnerships in planning and decision making.

There are also special programmes on shoreline management, national parks and nature reserves, cultural heritage etc. which include a spatial planning element.

Land information systems including GIS applications, are well developed in Finland. During the past few years, new systems for monitoring changes in the settlement structure in urban regions, including land use in urban centres and neighbourhoods, and the quality of built-up environment, have been initiated. Related indicators are also being developed.

Cross-Sectoral Issues

1. **Decision-making Structure:** The Land Use Department of the Ministry of the Environment is the Department primarily responsible for an integrated approach to the planning and management of land resources. The Ministry is a member of the national coordination mechanism for sustainable development.
In Finland, land use is guided through a hierarchical system of plans, in which the higher level plans are used to guide the preparation of lower level (more detailed) plans. The law does not recognize any land use planning at the national level, but the Ministry of the Environment prepares strategy documents for spatial development.
Planning itself is highly decentralized. Municipalities prepare and approve their own plans, which often need only sanctioning by higher level authorities. This feature has been further strengthened in the 1990s through gradual delegation of additional powers to lower level authorities. Today, sanctioning by the regional environmental centreis only needed for the most important local plans, while MOE sanctions plans only for regional capitals. Regional environment centres have been made responsible for integrating guidlines for land use with environmental and nature protection, protection of culturally valuable environments, and water resource management.

2. **Capacity-Building/Technology Issues:** No information.

3. **Major Groups:** (See 1 above).

4. **Finance:** No information.

5. **Regional/International Cooperation:** Within the framework of its bilateral development cooperation, Finland supports various programmes and projects with objectives directly or indirectly related to the management and protection of land resources. There are also various projects with the object of developing mapping and cartography. Land use planning and protection of land resources is taken into account, when relevant, in all development cooperation activities. Special attention is given to this aspect is paid in projects related to rural development and forestry. In the nearby areas - in Russia, Estonia and Latvia - Finland has supported training activities in the field of land use planning and projects with aspects relevant to land resource management. In addition, Finland actively takes part in relevant international, regional and sub-regional activities, such as those carried out within ECE, EU, HELCOM and the Council of Baltic States. The Baltic Vision developed jointly with the other countries in the region, and regional planning in Estonia are examples of these activities.

AGENDA 21 CHAPTER 11: COMBATING DEFORESTATION

NATIONAL PRIORITY: **Very High**

STATUS REPORT: The forests are Finland's most important natural resource. In 1995, the value of forest industry exports totalled FIM 59.1 billion (US$12.9 billion) and they accounted for 34 per cent of total exports, an increase of 12 percent over the year before. As Finland's forests renew relatively rapidly, there is good potential for using them according to the principles of sustainable development. Forest growth clearly exceeds harvesting in Finland.
In the follow-up process to the second Ministerial Conference on the Protection of Forests in Europe (held in 1993) a set of Pan-European criteria and indicators for sustainable forest management has been developed. With their help, it is possible to form a versatile picture of (1) the forest resources and their importance as carbon sinks; (2) the health and vitality of forests; (3) timber and other non-wood forest products; (4) the diversity of ecosystems; (5) the protective functions of forests and (6) the social and economic effects of forestry. Based on the Pan-European set of criteria and indicators, a national set of criteria and indicators for sustainable forest management has been developed in Finland. These are now being tested as policy tools at the national level and as a planning tool at sub-national and local levels.

Forest land covers 75% of Finland's total land area. Private citizens own 58% of commercial forest land, while companies own 8% and the State, 29%. This means that the responsibility and authority regarding the state of forests is to a considerable extent in the hands of private persons. About 0.7% of Finland´s forest land is regenerated annually. These areas are always either replanted, sown or regenerated naturally. If forest exploitation in the economy remains at the present level, Finland's forest resources will continue to grow at least until 2030.

Finland's forests are substantial carbon dioxide sinks and contribute to combating the intensification of the global greenhouse effect. In 1990, the amount of carbon storage in forests, soil, and vegetation was some 5,600-8,000 million tonnes of carbon. The latest national forest inventory, done for 1986-94 covers the whole country and includes about 80,000 sample plots, satellite images and digital map data. The next inventory will cover the years 1996-2000. Action has been taken to improve forest productivity and tolerance to environmental stress: tree breeding, seed technology, seed procurement networks, germ-plasma banks, in-vitro techniques and in-situ/ex-situ conservation. Issues such as forest extension service, public education in forestry, research needs, review of research projects, analysis of existing forest programmes, geographic information on forests, remote sensing, multiple roles of forests, national plans for planted forests, environmental impact assessments and forest industry efficiency have been given special emphasis. Attention has also been paid to post graduate education in forestry, indigenous knowledge of forests, land classification, land use surveys and ecotourism. Information exchange linkages and the integration of social, economic and ecological values into national economic accounting systems were dealt with in part before UNCED and fully after, while investment analysis and feasibility studies as well as the promotion of small scale forest-based industries were addressed partly after UNCED. Logging, air pollution, acidification and natural causes have only a light impact on forest loss or damage.

Cross-Sectoral Issues

1. **Decision-making Structure:** The Department of Forestry within the Ministry of Agriculture and Forestry is primarily responsible for the forestry sector. Other ministries and institutions actively involved in forestry matters are the Forestry Development Centre, the Ministry of the Environment, the State Forest and Park Service, the Finnish Forest Research Institute, the Forestry Centres, the Forest Management Associations and the Finnish Environment Institute. Forestry legislation consists of 10 different acts while the **forestry plan** is based on the Revised Forest 2000 Programme and the New Environmental Programme for Forestry in Finland, which take into consideration other land use options. Part of the legislation has recently been revised to respond to the decisions made at UNCED and the second Ministerial Conference on the Protection of Forests in Europe. Extension has a key role in promoting sustainable forestry in Finland. The Forestry Centres control the implementation of laws and regulations at the local level. One of the main tasks of the Forestry Centres is to give forestry extension services. Also the Forest Management Associations, which are owned by the forest owners, give extension services at the local level.

2. **Capacity-Building/Technology Issues:** The focus of the sector has shifted from wood production towards management of the forest ecosystem. As Finland has been highly dependent on forestry, the institutional forestry structures are highly developed and sophisticated. Still, partly because of its commitments to UNCED and the Ministerial Conference on the Protection of Forests in Europe (1993), Finland is further developing its institutional structures, as outlined in the New Environmental Programme for Forestry in Finland, confirmed by the Ministry of Agriculture and Forestry, and by the Ministry of the Environment in July 1994. The total number of trained foresters is about 9,000; some 330 foresters graduate each year. The forestry sector is properly staffed at all levels.

3. **Major Groups:** The following major groups are important to sustainable forestry: the private sector, local communities, non-governmental organizations, indigenous people (the Sámi people) and youth.

4. **Finance:** Governmental funding of the forestry sector has declined due to the general recession in Finland.

5. **Regional/International Cooperation:** Finland supports the effective implementation of the non-legally binding authoritative statement of principles for a global consensus of the management, conservation and sustainable development of all types of forests, adopted by UNCED. Finland has proven its willingness to promote the implementation of the commitments made at the Rio Conference on the European level by co-chairing the second Ministerial Conference on the Protection of Forests in Europe and by guiding the follow-up work of this conference. Finland has committed itself to the Helsinki Resolutions and has signed the International Tropical Timber Agreement in 1996. Finland has actively supported the work of the Intergovernmental Panel on Forests by hosting the Intergovernmental Seminar on Criteria and Indicators for Sustainable Forest Managements (ISCI) in August 1996. Finland cooperates actively with the other Nordic countries, as well as with the Baltic Countries and the Russian Federation.

STATISTICAL DATA/INDICATORS

	1985	1990	1995
Forest Area (Km^2)	232,220	231,431	229,870
Protected forest area (% of total productive forest land, including forest and scrub land)			9.0
Roundwood production (solid volume of roundwood without bark in million m^3)	40.7	40.7	47.2
Deforestation rate (Km^2/annum)			
Reforestation rate (Km^2/annum)	1,424	1,442	1,671
Other data:			
Number of people earning their living from the forest sector (Total number & % of population)	149,000 6.1%	129,000 5.2%	102,000 4.9%
National income from forestry sector in % of GNP	8.5%	7.4%	9.4%
Income from export of forest products, US$	6,640 mill.	8,333 mill.	12,913 mill.
Import of forest products, US$		534 mill.	770 mill.

AGENDA 21 CHAPTER 12: MANAGING FRAGILE ECOSYSTEMS: COMBATING DESERTIFICATION AND DROUGHT

NATIONAL PRIORITY: Not applicable

STATUS REPORT:

International Convention to Combat Desertification in Countries Experiencing Drought and/or Desertification Particularly in Africa

- Convention signed in 1994; ratified in 1995.

Additional comments relevant to this chapter

There are no deserts or areas in danger of desertification in Finland.

Cross-Sectoral Issues

1. **Decision-Making Structure:** No information.

2. **Capacity-Building/Technology Issues:** No information.

3. **Major Groups:** No information.

4. **Finance:** No information.

5. **Regional/International Cooperation:** Finland has participated actively in the negotiation process of the Desertification Convention and provided financing to the voluntary fund of the negotiation process.

STATISTICAL DATA/INDICATORS

	1980	1990	Latest 199_
Land affected by desertification (Km^2)	NA	NA	
Other data			

AGENDA 21 CHAPTER 13: MANAGING FRAGILE ECOSYSTEMS: SUSTAINABLE MOUNTAIN DEVELOPMENTSTATUS REPORT:

NATIONAL PRIORITY

STATUS REPORT The northernmost part in Finland, Lapland, is ecologically comparable with mountain areas. The province of Lapland extends over approximately 99,000 Km^2, one-third of the country. Although the topography of the landscape is smooth, except fell areas, the location mostly north of the Arctic Circle (between 65 and 70 degree of latitude) makes the environment stressed and fragile. The region is subartic and represents a transition zone between arctic and boreal zones. Coniferous forests (northboreal) are naturally dominant (50,000 Km^2), marsh land cover 34 % and the treeless highlands, mostly situated in the northern half of Lapland, comprise 1,550 Km^2, 16 % of the whole area. One-third, 3.4 million hectares, is protected by diverse programmes: natural parks, wilderness areas etc.

The winter is long, half a year, from October to May, when surface waters remain covered with ice. Mean temperatures are lowest in the middle of Lapland, in most continental parts -15 centogrades in January and February. In July the mean temperature is +14 centigrade. The precipitation is around 650 mm a year, one half being snows a consequence of Lapland´s location on the globe, the winter period means low light intensity and the summer season light nights (midnight sun).

Lapland is sparsly populated with the Sami people: slightly above 200,000 inhabitants, of which half lives in the two largest cities in the south, and 70 % in municipalities. The number of Sami people is just short of 7,000. Road systems are well developed with an 8,000 Km network of public roads as well as, in addition, a wealth of private and forestry roads. Although unemployment is higher, the standard of living equals the rest of Finland. Government assistance and development measures have an important role for the communal economy. Essential municipal infrastructure (i.e. water supply, waste treatment) and services (i.e. health care, organized waste collection) reach all population groups as well.

Service and tourism occupations are the most rapidly growing industries in Lapland. In the rural areas, the traditional way of life consists of a mixture of livelihoods i.e. reindeer and animal husbandry, minor scale agriculture, forestry and service. Big industry is concentrated in the Kemi-Tornio area on the cost of the Bothnian Bay, where there are forest and metal factories, and in the southeastern part of Lapland with forest industry. The share of exports on Lapland´s industrial output is nearly 43 %. Tourism employs 4,000 people. Nature and services connected to nature attractions are important: Lappish experiences with wintersport and sightseeing tour holidays are served by tourist centres, and also small family enterprises are also involved in the business.

The number of reindeer ranges from about 200,000 in winter to 350,000 in summer before slaughtering. The use by reindeer of natural lichen grounds as winter feeding sites and of fell tops as refuge from parasitic insects in summer has impacted posivively on the composition of species but negatively on vegetation and soil erosion. The problem of overgrazing is under investigation, and, as a consequence, the management of the reindeer husbandry is developing towards a more controlled and modest strategy; reindeer herds in many areas have been increased and the awareness of environmental affects is changing the practice of reindeer husbandry.

The Finnish Forest Research Institute's research station in Rovaniemi regularly publishes reports on forests and forestry in Lapland. The Lapland Forest Damage Project produced i.e. basic scientific knowledge about Lapland´s forest ecosystems and the changes taking place in them. Although forest growth in Lapland is a slow process, forests represent 16 % of the country´s timber resources and 10 % of its annual increment. Sustainability is a leading strategy in northern forestry.

The most prominent human impacts on natural waters are caused by intensive forest management areas, point loads to watercourses, water regulation for hydro energy purposes, and dredging waterways for timber floating routes. Long-range transport of air pollutants from Middle- and East-Europe, and local or regional emissions (the Kola Peninsula) have deteriorating effects on terrestrial and aquatic ecosystems. The Lapland Regional Environment Centre, as a part of the environmental administration has a role in promoting an environment where the values of nature and human activity are in balance, in relation to the nature and the people of Lapland. The work is influencing environmental decision-making, supervision, control, reporting on the state of the environment and other measures for improving environmental awareness. Renovation projects related to improving the state of the environment, for example following forestry ditching and timber floating, lay the foundation for those livelihoods that have a sustainable way of utilizing the biologically diverse nature and the clean environment of Lapland.

Cross-Sectoral Issues

1. **Decision-Making Structure:** See status report.

2. **Capacity-Building/Technology Issues:** See status report.

3. **Major Groups:** See status report and regional/international cooperation.

4. **Finance:** No information.

5. **Regional/International Cooperation:**
The Lapland Regional Environment Centre´s activities emphasize cooperation among municipalities, other authorities and research institutes, as well as international cooperation with neighbouring countries.

STATISTICAL DATA/INDICATORS

AGENDA 21 CHAPTER 14: PROMOTING SUSTAINABLE AGRICULTURE AND RURAL DEVELOPMENT

NATIONAL PRIORITY

STATUS REPORT: Action has been completed in all the areas described in Agenda 21.

The Agri-Environmental Programme in Finland was prepared for the years 1995-1999 according to a European Commission decision, and is co-financed by the European Union. The programme was prepared in cooperation with the Finnish agricultural and environmental authorities.

The Finnish Agri-Environmental Programme consists of four elements: the General Agricultural Environment Protection Scheme (the GAEPS); the Supplementary Protection Scheme (the SPS); the Scheme for Advisory Services and Training; and the Scheme for Demonstration Projects. The Åland Islands have their own separate Agri-Environmental Programme. The objective of the Agri-Environmental Programme is to practise agricultural and horticultural production in a sustainable way to reduce the impact on the environment cuased by production, to protect the traditional agricultural landscape, and to preserve the preconditions for production in the long term. The objective is also to regulate the use of production methods in order to achieve the goals set for preserving biological diversity, and at the same time, to produce pure, high quality products using acceptable production conditions and methods. By the end of 1996, over 82 % of the active farms participated in the programme. Thus requirements of the GAEPS cover over 90 % of the arable land of the country.

The General Agricultural Scheme consists of various undertakings the producer has to follow in order to receive the Agri-Environmental premium. These include, e.g. joint preparation of an environmental management programme for each farm by the farmer and a trained advisor. The programme must examine the current level of environmental management of the farm and establish the environmental measures needed on the farm (e.g. individual fertilization levels, checking and designing filter strips, designing the environmentally best combination of winter plant cover).

The Supplementary Protection Scheme consists of aid for organic production and conversion to it, establishment of riparian zones along watercourses and brooks, treatment of runoff waters from arable land, balanced use of nutrients in manure, landscape management and enhancing biodiversity, extending agricultural production and maintaining local breeds in danger of extinction. Support to organic production and local breeds is available throughout the country. Riparian zones, treatment of runoff waters and extension are concentrated in focal areas of water protection and ground water formation areas defined by environmental authorities. About 18,000 applications for different SPS measures were returned in spring 1996 compared to 7,600 applications returned in 1995. Because of the budgetary limits, only contracts of organic production, riparian zones and landscape management and biodiversity could be made. The area of organic production totalled almost 100,000 hectares by the end of 1996.

In March 1996, the Finnish Ministry of Agriculture and Forestry published a report on the sustainable use of biological diversity in agriculture, forestry, hunting and game management, reindeer husbandry, fisheries and water resources management. The report forms the basis for the preparation of a national action plan for the conservation of biological diversity in the field of the Ministry. It also implements the United Nations' Convention on Biological Diversity in this sector.

Rural and regional policies are being implemented through Finnish regional programmes, the EU's Objective 2, 5b and 6 Programmes and Community Inititives. These programmes aim especially at stimulating economic activity in order to create new jobs. Objective 5b for the EU Structural Funds is the development of rural areas; objective 6 is the development of sparsely populated areas. A new rural policy, the Rural Programme (1996), aims at achieving rural viability and improving rural areas by diversifying rural economic activities, creating networks and increasing interaction with towns.

Cross-Sectoral Issues

1. **Decision-making Structure**: The Ministry of Agriculture and Forestry is primarly responsible for agriculture and rural development in Finland. The Ministry of the Interior is responsible for coordinating regional development planning in cooperation with other ministries.
National legislation covering agriculture and rural development consists of the following laws:
(1) Act on Rural Industries; (2) Act on the Measures for Structural Policy in Agriculture; (3) Act on the Implementation of the Common Agricultural Policy in the European Communities; and (4) Act on Regional Development.
The laws have been reviewed and modified to meet the requirements for sustainable development. The Agri-Environmental Programme and its measures give an incentive to farmers to adopt practices that maintain the quality and quantity of natural resources. Loading of surface waters is regulated, and contamination of groundwaters is prohibited by the Water Act, but this has not prevented the problems caused by diffuse loading.
Finland, as one of the most rural member countries of the European Union, needs a reinforced rural policy. Horizontal rural policy has been implemented in Finland since 1988 in collaboration with several different branches of administration as well as regional and local organs. In consistency with the subsidiarity principle, the role of the provinces in programming has increased. In accordance with the partnership principle, the organisations concerned with employment or industry and commerce participate in the regional policy planning. In addition, municipalities and enterprises take part in the local development more than they did previously.

2. **Capacity-Building/Technology Issues:** No specific information.
3. **Major Groups:** See status report above.

4. **Finance:** The General Agricultural Environment Protection Scheme (GAEPS) has been formulated so that all farmers have the possibility to apply for and receive compensation for carrying out environmental measures. The premium is differentiated by region and cultivated crops and calculated according to the additional costs caused by the requirements of GAEPS and the yield losses. The premium calculated for each measure of the Supplementary Protection Scheme is based on the costs of undertakings required by the scheme.

5. **Regional/International Cooperation:** The Environmental Support Programme of Agriculture has been prepared according to the regulations of the European Council.
Preservation of the genetic material of fields crops has been realised in cooperation with the Nordic countries and the Nordic Gene Bank (established in 1979).

STATISTICAL DATA/INDICATORS				
	1985	**1990**	**Latest 1995**	
Agricultural land (Km^2)	25,420	25,580	25,250	
Agricultural land % of total land area	7.5	7.6	7.46	
Agricultural land per farmer (household)/ha	13	15	18	
	1989-90	**1992-93**	**Latest 1994**	
Consumption of fertilizers (Kg N/ ha agricultural land as of 1990) Consumption of fertilizers (Kg P/ ha agricultural land as of 1990)	10 29	111 31	102 20	
Other data				

AGENDA 21 CHAPTER 15: CONSERVATION OF BIOLOGICAL DIVERSITY

NATIONAL PRIORITY: Very High

STATUS REPORT:

Convention on Biological Diversity (CBD) signed in 1992; ratified in 1994; entered into force 1 August, 1994

Convention on International Trade in Endangered Species of Wild Fauna and Flora signed in 1976.

- Latest report submitted in 1994.

Finland has been a Party to CITES since 8 August 1976. The country became a member of the European Union on 1 January 1995 and is therefore bound by EU Regulations 3626/82 of 31 December 1982 and 3418/83 of 28 November 1983 on the implementation of Cites in the Union.

Additional comments relevant to this chapter Finland has reviewed and revised its legislation and adopted various national programmes and decisions in accordance with the objectives of Chapter 15 and international agreements in this field. In 1994, the Council of State adopted a decision-in-principle on the implementation of the principles of sustainable forest management with special emphasis on the conservation of biological diversity and other environmental aspects. The aim is to preserve, and, if necessary, restore the unique diversity of the Finnish ecosystems, biotypes and organisms, and their populations.

In January 1995, the Ministry of the Environment adopted a decision-in-principle on valuable cultural landscapes of about 730,000 hectares in Finland for the promotion of landscape management. The aim is to develop a management system of cultural landscapes to keep open landscapes in production, and to preserve important habitats formed by traditional rural land-use methods, natural pastures, meadows and semi-open woodlands. Landscape managament relies upon cooperation between different authorities.

In December 1995, the Council of State adopted a decision-in-principle on the implementation of the bilogical Diversity Convention.

In March 1995, the Ministry of the Environment prepared a strategy on different tasks and responsibilities for its implementation. A National Biodiversity Committee was set up by the Ministry of the Environment in March 1996 to prepare a national action programme by end March 1997 with cross-sectoral approach for biological diversity, and to follow the implementation of the programme. The programme will also identify the needs for research and capacity-building both at the national and international level.

There is a National Strategy to Conserve and Maintain Threatened Species and Ecosystems. In addition, special protection plans have been completed for many endangered species.

In June 1996, the Finnish Government adopted a decision-in-principle on the protection of old-growth forests in Finland. The aim is to preserve these areas in their natural state as conservation areas in accordance with the new Nature Conservation Act.

Both the Nature Conservation Act and the Forest Act have been revised, and they entered into force on 1 January 1997. Regulations related to the conservation of biological diversity are included in the Acts. The aim of the Nature Conservation Act is to maintain biological diversity, conserve nature's beauty and scientific value, to promote sustainable use of natural resources and environment, to raise public awareness about nature in general, and to promote scientific research. The implementation of the New Environmental Programme for Forestry in Finland is also important for achieving these targets.

As a member of the EU, Finland takes into account the EU directives on wild flora and fauna and birdlife when deciding on national conservation actions and areas to be included in the Natura 2000 network of protected areas currently being set up by the European Union. Numerous nature reserves have been set up to preserve biotopes and species typical to Finland. In order to preserve natural features of national interest, six national conservation programmes have been drawn up, namely the Peatland Conservation Programme, the Eskers Conservation Programme, the Bird Sanctuaries Conservation Programme, the Shoreline Conservation Programme, the Herb-rich Forest Programme, and the Old-growth Forest Programme. The total land area of nature reserves is 1,752,619 hectares. In addition, the Finnish Agri-Environmental Programme (EEC Reg. No. 2078/92) aims at protecting the genetic diversity of agricultural plant and animal species, and at preserving and restoring biotopes essential for agriculture-dependent, threatened wildlife.

According to the Water Act (1961), it is not allowed - without a permission - to build constructions or to discharge waste waters which may cause a decrease in natural resources or damage to the natural landscape, have harmful effects on fish or changes in water biology. During the past few years, Finland has harmonized its legislation on water protection in accordance with that of the European Union. According to the Convention on the Protection of the Marine Environment of the Baltic Sea (Helsinki Convention 1974, revised in 1992), the parties must conserve the biological diversity of coastal ecosystems. The revised Convention also calls for the protection of the whole catchment area of the Baltic Sea. In addition, the new Nature Conservation Act and the Forest Act, as well as the Building Act contain provisions on the conservation of biological diversity of coastal ecosystems. The new Water Protection Programme to the Year 2005, currently under preparation, emphasizes efforts to enhance research on aquatic nature and to intensify monitoring and assessment of conservation efforts.

Cross-Sectoral Issues

1. Decision-making Structure: The Ministry of the Environment is responsible for the conservation of biodiversity and genetic resources. The Ministry is adequately involved in national decision-making concerning the sustainable use and management of natural resources. It shares this responsibility with the Ministry of Agriculture and Forestry. In the State Forest and Park Service Act (1994) the regulations related to the conservation of biological diversity are included.

3. Capacity-Building: In line with the decision-in-principle of 1995, the Academy of Finland has prepared a multidisciplinary biodiversity research programme (1997-2003). Finland emphasizes the need for multidisciplinary knowledge for the conservation and management of ecosystems and the development of data on the impacts of natural resources use and on indicators for biological diversity conservation and the economic value of natural resources. Information material and handbooks on nature conservation plans and programmes for biodiversity needs have been made for forestry and agriculture practices.
The Nature Research Unit under the Finnish Environmental Institute has coordinated the National Biodiversity Research Programme (LUMO) 1991-1996. The pool of scientists working in the field of biodiversity consists of approximately 500 persons. The taxonomical work concerning flora and fauna is carried out by the natural historical museums within the universities. In addition, the national forest inventories include data related to biodiversity. The data have been developed systematically in the 1990s. During 1993-1996, everyone working in the agriculture and forestry sectors received training and education on the maintenance and sustainable use of biological diversity.

4. Major Groups: As almost two-thirds of the forest area is owned by private forest owners, active participation and support at local and regional levels has a long history.

5. Finance: During the past ten years, over FIM 1 billion (appr. US$ 250 million) has been allocated for the acquisition of nature conservation areas and for compensation paid to the landowners. In addition, state-owned property has been used to exchange land in the acquisition of protection areas. Since 1996, the EU Committee on the Conservation of Nature has appropriated FIM 15.7 million, and in the year 1997, FIM 30 million was allocated from the EU LIFE fund to Finland for nature conservation purposes. The fund budget for 1997 amounts to 800 - 840 million, of which 50% will be allocated for protection projects complying with the environmental policy adopted by the EU.

6. Regional/ International Cooperation: Finland participates in the biodiversity projects of the EU/European Environment Agency; UNEP; the Council of Europe; and the Nordic Council of Ministers, and cooperates with the European Connect Network of Nature Conservation Research Unit, the Environmental Data Centre of the EU, the European Endangered Species Programme and the Species Specific Programme, as well as with the Arctic Environmental Protection Plan (CAFF). Finland also supports GEF, UNEP and international NGOs, for example the IUCN. There is also an active Finnish-Baltic cooperation as well as cooperation with Russia to inventory valuable nature areas and to plan a network of protected areas (e.g. Green Belt). Finnish bilateral development programmes directly or indirectly try to preserve the biological diversity in the target countries. Finland's proposal for the nature conservation area network, called for by the EU directives on nature conservation, is due to be ready in 1997 (see 1 and 5 above).

STATISTICAL DATA/INDICATORS

	1992	**Latest 1995**
Protected area as % of the productive forest land (forest and scrub land)		5.5
Productive forest land areas where the degree on protection varies has been calculated some 10 percent of the forest and scrub land.	**1990**	**Latest 1991**
Number of threatened species (10% of assessed organisms in 1991)	-	1,692
Protected land area % of the total land area in 1995 was 13.2%.		

AGENDA 21 CHAPTER 16: ENVIRONMENTALLY SOUND MANAGEMENT OF BIOTECHNOLOGY

NATIONAL PRIORITY:	
STATUS REPORT: The National Advisory Board on Biotechnology, which has representatives from governmental institutions, industry, research and consumer organisations, is working as a advisory body for the Board for Gene Technology. Two successful and significant programmes are The National Development Programme on Biotechnology for which the Technology Development Centre is responsible and the Genome Research Programme for 1994-2000 conducted by the Academy of Finland. The evaluation has not yet been made.	

Cross-Sectoral Issues

1. **Decision-making Structure:** The official body established to deal with legal and policy issues related to environmentally sound management of biotechnology is the Board for Gene Technology which is subordinate to the Ministry of Social Affairs and Health. The Gene Technology Act (G.T.A.) is based on the two EU directives (90/219/EEC and 90/220/EEC). It entered into force the first of June 1995. In addition to the directives, the G.T.A. covers also contained use of plants and animals. The purpose of the Genetechnology Act is to promote safe and ethically acceptable use of gene technology.

2. **Capacity-Building/Technology Issues:** The Finnish industrial enterprises have specialized in enzyme and foodstuffs technology, and the universities in transgenic animals.

3. **Major Groups:** No information.

4. **Finance:** Public funding is to some extent available for public and private sector firms at the community level to innovate and market biotechnologies and to adopt effective measures for their environmentally sound application and management.

5. **Regional/International Cooperation:** Finland participates in the Nordic Biotechnology Programme financed by the Nordic Industry Fund.

STATISTICAL DATA/INDICATORS

AGENDA 21 CHAPTER 17: PROTECTION OF THE OCEANS, ALL KINDS OF SEAS, INCLUDING ENCLOSED AND SEMI-ENCLOSED SEAS, AND COASTAL AREAS AND THE PROTECTION, RATIONAL USE AND DEVELOPMENT OF THEIR LIVING RESOURCES

NATIONAL PRIORITY: **Very High**

STATUS REPORT:

The UN Convention on the Law of the Sea
Signed in 1982; ratified in 1996.

See also the attached tables on the next pages.

A national policy on oceans is part of the National Sustainable Development Strategy. An **integrated coastal area management** programme is being planned through the European Union. Most activities under this programme area are rated "very important" and have been fully covered. Some gaps are being addressed. Finland has a fishery zone, but has not yet established an EEZ. Preparations for the establishment of an EEZ are in progress, and a declaration in accordance with international law can be expected in 1997.

The following economic incentives have been introduced for **marine environmental protection:** a municipal waste water charge, a water protection charge, an oil pollution fee, a compulsory waste reception fee for ships calling at Finnish ports irrespective of the amount of garbage received, and a CO_2/energy tax on fossil fuels. Prior assessment is mandatory for activities with impact on the marine and coastal environment. Most activities under this programme area, including sewage-related issues, are rated "very important"; most have been fully covered; somegaps are being addressed.

"Analysis, assessments and systematic observation of the role of oceans as a carbon sink" is considered "very important" but is poorly covered. "Coordinating national and regional observation programmes" and "providing improved forecasts" are rated "important" and are well covered. Gaps are being addressed.

Finland participates in the development of socio-economic and environmental indicators in systematic observation systems in clearing houses and in the Global Ocean Observing System. The Government does not participate in mussel watch programmes.

As there is no fully integrated coastal management yet, there are also no data bases especially for this purpose. Existing data adequately cover habitats, protected areas, marine degradation caused by land- and sea-based activities, estuaries, wetlands, sea grass beds and other spawning and nursery areas in coastal zones.

Since the 1970's frequent comprehensive assessments of the state of and changes in the environment of coastal and marine areas have been carried out.

CROSS-SECTORAL ISSUES

1. Decision-making Structure: The Ministry of the Environment is in charge of integrated coastal area management planning and is a full member of the National Commission for Sustainable Development.

2. Capacity-Building/Technology Issues: Finland has access to and applies the best available technology to prevent pollution of the marine environment.

3. Major Groups: Major Groups on the national and local level, including the private sector, are full members of the Advisory Board for the Marine Environment. Meetings are held with small-scale artisanal fishermen when relevant. Indigenous people participate in the programmes under the Arctic Environmental Protection Strategy (AEPS)/CAFF, Sustainable development and utilization of renewable resources.

4. Finance: No information.

5. Regional/International cooperation: Finland cooperates at the international level in addressing the prevention, reduction and control of the degradation of the marine environment from land- and sea-based activities. Finland gives high priority to regional and subregional cooperation and cooperates intensively in marine environment approaches at the global level. EU common fisheries policy takes into account Finnish fishery policy as far as UN-resolutions related to **sustainable use and conservation of marine living resources of the high seas** are concerned. There are no plans concerning the FAO Code of Conduct of Responsible Fishing, as responses depend on EU policy. The World Bank Group participates in the "Programme Implementation Task Force/Baltic Sea".

STATISTICAL DATA/INDICATORS

	1980	1990	Latest 1994
Catches of marine species (metric tons)	83,559	73,709	103,420
Population in coastal areas	1,620	1,699	1,745
Population served by waste water treatment (% of country's total population)	66%	78%	80%
Discharges of oil into coastal waters (metric tons)	130	98	26
Releases of phosphate into coastal waters (metric tons), as phosphorus	1,730	2,180	1,660
Releases of nitrate into coastal waters (metric tons), as nitrogen	36,800	45,000	39,900
Other data: There are no further national indicators specifically for this chapter and no work is being done to develop new indicators.			

Chapter 17 (Oceans) Continued:

Check the boxes in the column below left:
For level of importance use:
*** = very important
** = important
* = not important
N = not relevant

Check the boxes in the column below right:
For level of implementation use:
*** = fully covered
** = well covered - gaps being addressed
* = poorly covered
O = not covered
N = not relevant

TABLE I. THE FOLLOWING ACTIVITIES HAVE BEEN CONSIDERED BY THE APPROPRIATE COORDINATING MECHANISM FOR INTEGRATED MANAGEMENT AND SUSTAINABLE DEVELOPMENT OF COASTAL AND MARINE AREAS AND THEIR RESOURCES.

LEVEL OF IMPORTANCE	ACTIVITY AS DESCRIBED IN AGENDA 21	LEVEL OF IMPLEMENTATION
***	a. Preparation and implementation of land and water use and siting policies.	**
***	b. Implementation of integrated coastal and marine management and sustainable development plans and programmes at appropriate levels.	
***	c. Preparation of coastal profiles identifying critical areas including eroded zones, physical processes, development patterns, user conflicts and specific priorities for management.	***
***	d. Prior environmental impact assessment, systematic observation and follow-up of major projects, including systematic incorporation of results in decision-making.	***
***	e. Contingency plans for human induced and natural disasters.	***
**	f. Improvement of coastal human settlements, especially in housing, drinking water and treatment and disposal of sewage, solid wastes and industrial effluents.	***
**	g. Periodic assessment of the impacts of external factors and phenomena to ensure that the objectives of integrated management and sustainable development of coastal areas and marine environment are met.	***
***	h. Conservation and restoration of altered critical habitats.	**
***	I. Integration of sectoral programmes on sustainable development for settlements, agriculture, tourism, fishing, ports and industries affecting the coastal areas.	**
***	J. Infrastructure adaptation and alternative employment.	***
***	K. Human resource development and training.	***
***	L. Public education, awareness and information programmes.	***
***	M. Promoting environmentally sound technology and sustainable practices.	***
***	N. Development and simultaneous implementation of environmental quality criteria.	***

TABLE II. TECNOLOGY (MARINE ENVIRONMENT)

LEVEL OF IMPORTANCE	ACTIVITY AS DESCRIBED IN AGENDA 21	LEVEL OF IMPLEMENTATION
***	A. Apply preventive, precautionary and anticipatory approaches so as to avoid degradation of the marine environment, as well as to reduce the risk of long-term or irreversible adverse effects upon it.	***
***	B. Ensure prior assessment of activities that may have significant adverse impacts upon the marine environment.	***
***	C. Integrate protection of the marine environment into relevant general environmental, social and economic development policies.	**
***	D. Develop economic incentives, where appropriate, to apply clean technologies and other means consistent with the internalization of environmental costs, such as the polluter pays principle, so as to avoid degradation of the marine environment.	**
N	E. Improve the living standards of coastal populations, particularly in developing countries, so as to contribute to reducing the degradation of the coastal and marine environment.	N
***	F. Effective monitoring and surveillance within the exclusive economic zone (EEZ) of fish harvesting and transportation of toxic and other hazardous materials.	***

TABLE III. SEWAGE RELATED ISSUES

LEVEL OF IMPORTANCE	ACTIVITY AS DESCRIBED IN AGENDA 21	LEVEL OF IMPLEMENTATION
•••	A. Sewage related problems are considered when formulating or reviewing coastal development plans, including human development plans.	••
•••	B. Sewage treatment facilities are built in accordance with national policies.	•••
•••	C. Coastal outfalls are located so as to maintain acceptable level of environmental quality and to avoid exposing shell fisheries, water intakes and bathing areas to pathogens.	•••
•••	D. The Government promotes primary treatment of municipal sewage discharged to rivers, estuaries and the sea, or other solutions appropriate to specific sites.	•••
•••	E. The Government supports the establishment and improvement of local, national, subregional and regional, as necessary, regulatory and monitoring programmes to control effluent discharge. Minimum sewage effluent guidelines and water quality criteria are in use.	•••

TABLE IV. OTHER SOURCES OF MARINE POLLUTION, THE GOVERNMENT HAS:

LEVEL OF IMPORTANCE	ACTIVITY AS DESCRIBED IN AGENDA 21	LEVEL OF IMPLEMENTATION
•••	A. Established or improved upon, as necessary, regulatory an dmonitoring programmes to control emissions, including recycling technologies.	•••
•••	B. Promoted risk and environmental impact assessments to help ensure an acceptable level of environmental quality.s	•••
•••	C. Promoted assessment and cooperation at the regional level, where appropriate, with respect to the input of point source pollutants from the marine environment.	•••
•••	D. Taken steps to eliminate emissions or discharges of organohalogen compounds from the marine environment.	••
•••	E. Taken steps to eliminate/reduce emissions or discharges or other synthetic organic compounds from the marine environment.	••
•••	F. Promoted controls over anthropogenic inputs of nitrogen and phosphorous that enter coastal waters where such problems as euthrophication threaten the marine environment or its resources.	••
•••	G. Taken steps to develop and implement environmentally sound land-use techniques and practices to reduce run-off to water courses and estuaries which would cause pollution or degradation of the marine environment.	••
•••	H. Promoted the use of environmentally less harmful pesticides and fertilizers and alternative methods for pest control, and considered the prohibition of those found to be environmentally unsound.	•••
•••	I. Adopted new initiatives at national, subregional and regional levels for controlling the input of non-point source pollutants which require broad changes in sewage and waste management, agricultural practices, mining, construction and transportation.	•••
•••	J. Taken steps to control and prevent coastal erosion and siltation due to anthropogenic factors related to, inter alia, land-use and construction techniques and practices.	N

TABLE V. ADDRESSING CRITICAL UNCERTAINTIES FOR THE MANAGEMENT OF THE MARINE ENVIRONMENT AND CLIMATE CHANGE. IN ORDER TO IMPLEMENT THIS PROGRAMME AREA THE GOVERNMENT IS CARRYING OUT THE FOLLOWING ACTIVITIES:

LEVEL OF IMPORTANCE	ACTIVITY AS DESCRIBED IN AGENDA 21	LEVEL OF IMPLEMENTATION
••	A. Coordinating national and regional observation programmes for coastal and near-shore phenomena related to climate change and for research parameters essential for marine and coastal management in all regions.	••
••	B. Providing improved forecasts of marine conditions for the safety of inhabitants of coastal areas and for the efficiency of marine operations.	••
	C. Adopting special measures to cope with and adapt to potential climate change and sea-level rise.	
N	D. Participating in coastal vulnerability assessment, modelling and response strategies particularly for priority areas, such as small islands and low-lying and critical coastal areas.	N
•	E. Identifying ongoing and planned programmes on systematic observation of the marine environment, with a view to integrating activities and establishing priorities to address critical uncertainties for oceans and all seas.	••
•	F. Research to determine the marine biological effects of increased levels of ultraviolet rays due to the depletion of the stratospheric ozone layer.	•
•••	G. Carrying out analysis, assessments and systematic observation of the role of oceans as a carbon sink.	•

TABLE VI. RATING OF ACTIVITIES IN THE AIR AND MARITIME TRANSPORT SECTORS IN THE SMALL ISLANDS DEVELOPING STATES (SIDS)

AIR TRANSPORT	RATING	MARITIME TRANSPORT	RATING
1. Frequency (external flights)		1. Frequency (external shipping)	
2. Frequency (in-country flights)		2. Frequency (in-country shipping)	
3. Cooperation at regional level in air transport and civil aviation		3. Cooperation at regional level in shipping	
4. Cooperation at international level		4. Cooperation at international level	
5. Economic viability of national air line		5. Economic viability of national shipping line(s)	
6. Economic viability of regional air line		6. Economic viability of regional shipping line (s)	
7. National level training in skills for air transport sector		7. National level training in skills for maritime transport sector	
8. Access to training in skills for air transport sector within the region		8. Regional level training in skills for maritime transport sector	
9. Access to international training for air transport sector		9. Access to international training for maritime transport sector	
10. Supportive of ICAO			

FINLAND

AGENDA 21 CHAPTER 18: PROTECTION OF THE QUALITY AND SUPPLY OF FRESHWATER RESOURCES: APPLICATION OF INTEGRATED APPROACHES TO THE DEVELOPMENT, MANAGEMENT AND USE OF WATER RESOURCES

NATIONAL PRIORITY: No Information

STATUS REPORT: Eighty-six percent of the population was served by public waterworks in 1994. The water supply facilities available to the majority of the Finnish population are well over basic level. About 78 % of the population was served by public sewer systems in 1994. The wastewater treatment in urban areas consists mainly of biological-chemical treatment.

The Finnish Ministry of the Environment is preparing long-term goals for the protection of waters for the year 2005. The goal setting is based on water use requirements and on safeguarding the functioning of ecosystems. The goals are based on the use of best technology or water protection practices. According to the National Water Protection Programme, the load from major pollution sources such as industry, agriculture and communities, will be considerably reduced during the programme period. The implementation of the first EU-based programme for reducing nutrition loads from agriculture run from 1995 to 1999.

One of Finlands priorities for freshwater resources is to cover all activities in society, in particular land use, agriculture and forestry, industry and energy generation, in such a manner as to introduce overall sustainable use of water resources. Water resources management plans will be developed in 1997 for the nitrogen sensitive water bodies that will be established according to an EU Directive.

In addition, the Environmental Programme for Forestry, the Environmental Programme for Rural Areas, and several major research projects promoting sustainable development as well as joint research projects concerning i.a. water conservation in agriculture and forestry have an impact on the quality of water resources. The state of water is under continuous monitoring so that the effects of water protection measures can be assessed.

Industry generated close to 900 million cubic meters of process and sanitary waste-water of which 700 million cubic meters were generated in the pulp and paper industry in 1994. Almost 80 per cent of the waste waters of pulp and paper industries are purified biologically, over 10 per cent chemically and 12 per cent by physical methods.

Cross-Sectoral Issues

1. **Decision-making Structure:** The Finnish Environment Institute maintains national monitoring networks which cover all main components of the hydrological cycle and several chemical analyses of water quality.
Municipalities take care, by large, of the water supply and wastewater treatment of communities.

2. **Capacity-Building/Technology Issues:** Education for the sustainable use of water resources has been increased as part of implementing the Environmental Programme for Forestry, and the Environmental Programme for Rural Areas. The main areas of environmental expertise of Finnish industry lie in waste-water treatment, vaporization and measuring techniques, and methods of raising the efficiency of the forest industry and combustion technology. Demand for environmental technology on export markets will increase.

3. **Major Groups:** The Association of Finnish Local Authorities participates in decision-making under this chapter.

4. **Finance:** The municipal wastewater and water supply investment costs are financed mainly by municipalities themselves, and operation and maintenance costs including capital costs are mainly covered by the users in compliance with the Polluter Pays Principle. Industry invested FIM 424 million (US$92 million) in water protection in 1994.

5. **Regional/International Cooperation:** Finland and Russia have agreed on an action plan for water pollution control for their common transboundary watercourses.
In the Finnish development cooperation, water sector has always played an important role. Seven per cent of the total aid has been allocated to water projects.

STATISTICAL DATA/INDICATORS

	1980	1990	Latest 1996	
Fresh water availability (total domestic/external in million m^3)	97 %	98 %	98 %	
Annual withdrawal of freshwater as % of available water	3	3	3	
Other data				

AGENDA 21 CHAPTER 19: **ENVIRONMENTALLY SOUND MANAGEMENT OF TOXIC CHEMICALS, INCLUDING PREVENTION OF ILLEGAL INTERNATIONAL TRAFFIC IN TOXIC AND DANGEROUS PRODUCTS**

NATIONAL PRIORITY:

STATUS REPORT: Finland has followed the Agenda 21 recommendations, developing and implementing obligations referring to chemicals, and participating in international cooperation in the chemical field.
As a member of the European Union, Finland has implemented EU legislation on chemicals.
Finnish industry is working to reduce chemicals risks. An example is the Responsible Care Programme covering environment, health and safety, which has been introduced by the chemical industry.

Cross-Sectoral Issues

1. **Decision-Making Structure:** The following ministries are involved in the decision-making: the Ministry of Social Affairs and Health, the Ministry of the Environment, the Ministry of Labour, and the Ministry of Trade and Industry.

2. **Capacity-Building/Technology Issues:** See (5) below.

3. **Major Groups:** The private sector and NGOs participate in the activities under this Chapter.

4. **Finance:** No information.

5. **Regional/International Cooperation:** In the field of chemicals control, Finland participates in the work of the European Union as a Member State. Finland also has cooperation in this field with the other Nordic countries, with the neighbouring countries, within the OECD, and in the framework of UN (UNEP, WHO, ILO).
Finland has contributed to the following programmes and projects in the field of chemicals and pesticides management: the development of laboratory facilities and analysis of pesticides in products as a component of safe management of pesticides in Egypt; the development of information system on chemicals in the Eastern Africa and South East Asia in the context of an ILO project; the initiation of a programme on the collection and final disposal of obsolete agricultural chemicals in Nicaragua; the preparation of comprehensive guidelines on the safe use of hazardous chemicals, mainly pesticides, for the use in the development cooperation projects.

STATISTICAL DATA/INDICATORS

AGENDA 21 CHAPTER 20: ENVIRONMENTALLY SOUND MANAGEMENT OF HAZARDOUS WASTES, INCLUDING PREVENTION OF ILLEGAL INTERNATIONAL TRAFFIC IN HAZARDOUS WASTES

NATIONAL PRIORITY:

STATUS REPORT:

The Basel Convention on the Control of Transboundary Movements of Hazardous Wastes and their Disposal was signed by Finland in 1989; ratified in 1991 and the latest information was provided to the Basel Convention Secretariat in 1996.

Additional comments relevant to this chapter

According to the latest statistics (1992), the annual generation of hazardous wastes in Finland amounts to about 270,000 tonnes.

Finland has the capacity to dispose of almost all wastes, and especially hazardous wastes generated in the country.

A major part of the hazardous wastes is transported to the national hazardous waste treatment and disposal plant where wastes are incinerated under strict limits for emissions imposed by environmental authorities. The annual incineration capacity of the plant is 65,000 tonnes at present.

The Government has executed prohibitions and restrictions on the use of, among others, the following dangerous substances: PCBs and PCTs, arsenic and asbestos. According to the decision on waste oil management, waste oils shall primarily be regenerated and secondarily incinerated. The marketing of batteries and accumulators containing heavy metals is limited.

In the future, more activities are meant to be concentrated on the development of environmentally sound and economically efficient collection of hazardous wastes and of transport schemes to get all hazardous waste properly treated.

Cross-Sectoral Issues

1. **Decision-making Structure:** The new Waste Act entered into force on 1 January 1994. The overall aim of the Act is to promote sustainable development through rational use of natural resources and through preventing and abating the danger of waste to human health and the environment. By implementing the new waste legislation, in addition to the measures taken so far, a majority of the requirements set in Chapters 20 and 21 of Agenda 21 can be fulfilled in Finland by the year 2000.

2. **Capacity-Building/Technology Issues:** No specific information.

3. **Major Groups:** No information.

4. **Finance:** No information.

5. **Regional/International Cooperation:** In order to tighten the control and monitoring of transboundary movements of hazardous waste, Finland has ratified the Basel Convention on the Control of Transboundary Movements of Hazardous Wastes and their Disposal. Finland has also implemented the OECD Council Decisions concerning hazardous waste.
The special EU directives on waste will mainly be implemented through Government Decisions under the Waste Act. As of 1996, the following Government Decisions concerning hazardous waste have been issued or were under preparation:
-Decision on batteries and accumulators
-Decree on transboundary movements of wastes.
Preparations for legislation will start shortly for
-New Decisions on PCB and PCT wastes
-Decision on incineration of hazardous waste
-Ministry of the Environment Decision on wastes and hazardous wastes.

STATISTICAL DATA/INDICATORS

	1980	1990	Latest 1992	
Generation of hazardous waste (t)			270,000	
Import of hazardous wastes (t)		9,900	9,800 **(1995)**	
Export of hazardous wastes (t)		19,200	26,100 **(1995)**	
Area of land contaminated by hazardous waste (km^2)				
Expenditure on hazardous waste treatment (US$)				
Other data				

AGENDA 21 CHAPTER 21: ENVIRONMENTALLY SOUND MANAGEMENT OF SOLID WASTES AND SEWAGE-RELATED ISSUES

NATIONAL PRIORITY:	No Information	

STATUS REPORT: The Ministry of the Environment has estimated that approximately 85 million tonnes of waste are produced annually in Finland. The average recovery rate of material or energy is about 47%. The largest amount of waste is generated in mining 35 million tonnes yearly, and in agriculture and forestry, about 23 million tonnes annually, the recovery rate of the latter being roughly 85%.

The main disposal method for municipal waste is landfills. In 1992, there were a total of 585 active landfills for municipal waste in the country.

Municipal solid waste is mostly collected by compacting trucks based on entrance collection or other types of collection. The systems serve almost all of Finland's population.

The implementation of the new waste legislation will ensure that most of the requirements set in Chapter 21 of Agenda 21 can be fulfilled in Finland by the year 2000.

Cross-Sectoral Issues

1. **Decision-making Structure:** The Ministry of the Environment, the Regional Environmental Centres and the municipalities are the bodies primarily responsible for waste management.
The new Waste Act entered into force on January 1, 1994. The overall aim is to promote sustainable development through rational use of natural resources and through preventing and abating such dangers and inconveniences that waste may cause to human health and the environment.
Where it is impossible to prevent waste generation, the waste generated shall be recycled or properly treated and disposed of. Recovery and recycling should be the first priority; a second alternative is conversion to energy. Waste or waste management are not allowed to cause environmental or health danger or inconvenience. Waste management should be based on the best economically available techniques and on sound practices for abating environmental and health risks. Anyone holding waste shall see to proper waste management. In some cases, however, municipalities are responsible for waste management.
The following Government decisions have been issued or are under preparation:
-Decision on emissions from incineration of municipal waste
-Decision on the use of sewage sludge in agriculture
-Decision on landfill requirements
-Decision on arrangements concerning packaging and packaging waste.

2. **Capacity-Building/Technology Issues:** No information.

3. **Major Groups:** No further information beyond what is stated above.

4. **Finance:** No information.

5. **Regional/International Cooperation:** No information.

STATISTICAL DATA/INDICATORS

	1980	1990	Latest 1992	
Generation of industrial and municipal waste (t)			56.5 mill. t.	
Waste disposed(Kg/capita)				
Expenditure on waste collection and treatment (US$) **Total**		750 mill. (1989)		
Waste recycling rates (%) **Municipal 30 %; industrial 60 %**				
Municipal waste disposal (Kg/capita) **(household) ~200 kg**				
Waste reduction rates per unit of GDP (t/year)	~	~	~	
Other data				

AGENDA 21 CHAPTER 22: SAFE AND ENVIRONMENTALLY SOUND MANAGEMENT OF RADIOACTIVE WASTES

NATIONAL PRIORITY: No Information

STATUS REPORT: In Finland, four nuclear power plants (NPPs) have been in operation for 15-20 years, and they have generated about 1,100 tU of spent fuel and more than 5,000m^3 of low and medium level waste. The accumulation of radioactive wastes from other sources is only about one per cent of that from the NPPs.

New waste treatment and conditioning technologies have been introduced at the NPPs in the past few years, enabling a significant reduction of waste generation and environmental discharge.

The Finnish waste management policy is based on disposal of low and medium level waste into high standard rock cavity repositories located at the NPP sites. At the Olkiluoto site, the repository has been in operation since 1992. The repository at the Loviisa site is under construction and is scheduled to be commissioned in 1998.

The present Nuclear Energy Act calls for the disposal of the spent fuel into the Finnish bedrock. Before, the spent fuel from the Loviisa NPP was shipped to Russia, but this is no longer an option. Based on the Council of State's decision-in-principle (1983), a long-range programme for the implementation of spent fuel disposal is in progress.

Cross-Sectoral Issues

1. **Decision-making Structure:** The Government grants licences for waste management facilities. The competent authority in matters pertaining to nuclear power is the Ministry of Trade and Industry, which oversees that the planning and implementation of any measures belonging to nuclear waste management are carried out in a timely and proper manner. The responsibility for the control of nuclear safety, including waste management, belongs to the Finnish Centre for Radiation and Nuclear Safety.
According to the legislation on nuclear waste management in Finland, each producer of nuclear waste is responsible for the safe management and disposal of the waste.

2. **Capacity-Building/Technology Issues:** See status report.

3. **Major Groups:** No information.

4. **Finance:** According to the legislation on nuclear waste management in Finland, each producer of nuclear waste is responsible for the financing of its operations. The nuclear power plants are obliged to levy funds for waste management during the operation.

5. **Regional/International Cooperation:** Finland has supported IAEA´s programmes (e.g. the RADWASS-programme). Finland has also participated in projects to improve the radioactive waste management practices in the North-Western parts of Russia.

STATISTICAL DATA/INDICATORS

AGENDA 21 CHAPTER 23-32: MAJOR GROUPS

The role of major groups are also covered under the various chapters of Agenda 21. The following is a summary of main objectives outlined in Agenda 21. Please check the appropriate boxes and describe briefly any important steps or obstacles.

STATUS REPORT ON PARTICIPATION BY MAJOR GROUPS AT THE NATIONAL AND LOCAL LEVELS

Ch. 24: GLOBAL ACTION FOR WOMEN TOWARDS SUSTAINABLE AND EQUITABLE DEVELOPMENT.
The Convention on the Elimination of All Forms of Discrimination Against Women was signed on 17 July 1980 and ratified on 4 September 1986.

24.b Increasing the proportion of women decision makers.

Percentage of women:	1992	1996
in government %	41	38
in parliament %	39.5	34
at local government level % (Municipal Councils)		30.6

Municipal elections held in October 1996 increased the proportion of women to 31.4%.

24.2.e assessing, reviewing, revising and implementing curricula and other educational material with a view to promoting dissemination of gender-relevant knowledge:
Curricula and educational material already promote gender relevant knowledge. (Centralized inspections of educational material does not exist in Finland.)

24.2.f and 24.2.c formulating and implementing policies, guidelines, strategies and plans for achievement of equality in all aspects of society including issuing a strategy by year 2000 to eliminate obstacles to full participation of women in sustainable development: Policies/strategies etc. are being drawn up.

24.2.d establishing mechanisms by 1995 to assess implementation and impact of development and environment policies and programmes on women: No plans at present.

Brief comments on this chapter (maximum 100 words) (please, do not exceed this page):

STATUS REPORT ON PARTICIPATION BY MAJOR GROUPS AT THE NATIONAL AND LOCAL LEVELS

Ch. 25: CHILDREN AND YOUTH IN SUSTAINABLE DEVELOPMENT.

25.4 establishing processes that promote dialogue between the youth and government at all levels and mechanisms that permit youth access to information and opportunity to present their views on implementing A21.
Name relevant youth fora (3-4 most important):

There is no process established by the government, but several groups and organisations work on the issue and some have even received financial support. The Nature League and the Scouts have established a Youth Environmental Parliament, and there are some Local Agenda 21 information centres (for example in Åland Island). The National Board on Education has supported 10 schools in its environmental education efforts by providing funding and material.

Describe their role in the national process: They are full participants.

25.6 reducing youth unemployment
Youth unemployment 1992: 25 % 1996: approximately 30 % **NOTE: in 1990 it was 6.7 %!**

25.5 ensuring that by year 2000 more than 50% of youth -- gender balanced -- have access to appropriate secondary education or vocational training.
The goal set in Agenda 21 will be reached by year 2000.

Brief comments on this chapter (maximum 100 words) (please, do not exceed this page):

Different youth organizations and youth groups are active around Agenda 21 issues just by their own interest. The Government has also involved them in the Rio follow-up work by including them in the Finnish National Commission on Sustainable Development and its sub-committees as full members. Two youth representatives were also included in Finland's delegation to the fourth session of the CSD.
Some schools have taken the issue as a central element in their curricula, and there the involvement of the pupils has been strong. In 1995-1996, ten Finnish schools participated in the international Rescue Mission: Planet Earth project on sustainable development indicators. In Finland, the project was funded and facilitated by the Ministry of the Environment and the Ministry for Foreign Affairs, and it was included in the official work of the Finnish National Commission on Sustainable Development. As a part of the pilot phase of the project, a special event, Day of Access, was held in February 1996, when the participating schools gathered together with the deceion-makers, including Ministers, and discussed the status and implementation of sustainable development in Finland. In the second phase of the project, almost a hundred schools are participating in the project, and the Ministry of the Environment has translated the indicators into Finnish and Swedish, the two official languages. A new Day of Access will be organized in January 1997.
Some cities have established citizens' fora on sustainable development where young people are also involved, and the Helsinki City Youth Office has established a Youth Environmental House as a centre for activities of environmental organisations.
A special remark should be made concerning youth unemployment. It has grown to be among the highest in the industrialized countries during the 1990s. In 1990, the unemployment rate among 15-24 yearolds was 6.7%; today the rate is approximately 30%. This affects the perspectives young people have on their future and does not promote a sense of being part of the society or being able to influence policy decisions.

(See also Chapter 6.)

STATUS REPORT ON PARTICIPATION BY MAJOR GROUPS AT THE NATIONAL AND LOCAL LEVELS

Ch. 26: RECOGNIZING AND STRENGTHENING THE ROLE OF INDIGENOUS PEOPLE AND THEIR COMMUNITIES.

26.3.a establishing a process to empower indigenous people and their communities -- through policies and legal instruments: In place.

26.3.b strengthening arrangements for active participation in national policies: Indigenous people participate fully in appropriate national processes.

26.3.c involving indigenous people in resource management strategies and programmes at the national and local level: Indigenous people are fully involved.

Brief comments on this chapter (maximum 100 words) (please, do not exceed this page):
The "Saami Parliament" is a full member of the National Commission on Sustainable Development.

Ch. 27: STRENGTHENING THE ROLE OF NON-GOVERNMENTAL ORGANIZATIONS: PARTNERS FOR SUSTAINABLE DEVELOPMENT.

27.5 developing mechanisms that allow NGOs to play their partnership role responsibly and effectively.
27.6 reviewing formal procedures and mechanisms to involve NGOs in decision making and implementation.
27.8 promoting and allowing NGOs to participate in the conception, establishment and evaluation of official mechanisms to review A21 implementation: Mechanisms already exist, and NGO imputs are important.

27.7 establishing a mutually productive dialogue by 1995 at the national level between NGOs and governments.

Brief comments on this chapter (maximum 100 words) (please, do not exceed this page):
The Government has included NGO representatives both in the permanent committees, such as the FNCSD and the Commission on Climate Change, and Ad hoc Committees and Working Groups, such as the MOE Ad Hoc Committee on Acidification.
The government has included and will include representatives of major groups in CSD meetings, past and future. Since 1995, activities undertaken by major groups have received financial support amounting to some US$200,000.
Government aid for NGO activities in developing countries amounted to some US$26 million.

STATUS REPORT ON PARTICIPATION BY MAJOR GROUPS AT THE NATIONAL AND LOCAL LEVELS

Ch. 28: LOCAL AUTHORITIES' INITIATIVES IN SUPPORT OF AGENDA 21.

28.2.d encouraging local authorities to implement and monitor programmes that aim to ensure participation of women and youth in local decision making.

There are at least 88 Local Agendas 21. They involve 50% of population.
Government supports of local agenda 21 initiatives.

The Association of Finnish Local Authorities started a pilot project, the Municipal Project for Sustainable Development, in 1992. The project ran through 1993, and although concrete changes in municipalities were minor, the project significantly prepared municipalities to develop local Agenda 21 programmes.
The Association of Finnish Local Authorities has promoted the implementation of the objectives of Agenda 21, and increased awareness and responsibility on sustainable development among office-holders by defining sustainable development in municipalities, organizing training courses, publishing articles, and creating tools for the promotion of sustainable development.
According to the mapping of the Association of Finnish Local Authorities, there were 41 municipalities working on Local Agendas 21 in autumn 1995. Although these municipalities comprised less than 10% of Finland's municipalities, some 38 % of the Finnish population lived in them. In autumn 1996, the number of municipalities preparing local Agendas 21 had increased to 88. Half of the Finnish population lives in these municipalities. Almost all larger municipalities are preparing them. Only about 10% of municipalities with a population of 2,000-6,000 are involved, but, among the smalles towns (fewer than 2,000 people), nearly 25% are working on Local Agendas 21.
Many municipalities have also actively participated in international cooperation to promote sustainable development in municipalities. By signing the so called Aalborg document, 22 municipalities have joint in the Sustainable Cities in Europe campaign.
In the near future, the Association of Finnish Local Authorities will support the participating municipalities by publishing a Local Agenda 21 guidebook, by helping them in developing local agenda programmes, by organizing a conference on climate change issues for the senior management of municipalities, and by arranging other seminars together with provincinal associations and regional environment centres.

STATUS REPORT ON PARTICIPATION BY MAJOR GROUPS AT THE NATIONAL AND LOCAL LEVELS

Ch. 29: STRENGTHENING THE ROLE OF WORKERS AND THEIR TRADE UNIONS.

29.2 full participation of workers in implementation and evaluation of A21.

29.3 a to e (By year 2000, (a) promoting ratification of ILO conventions; (b) establishing bipartite and tripartite mechanism on safety, health and sustainable development; (c) increasing number of environmental collective agreements; (d) reducing occupational accidents and injuries; (e) increasing workers' education and training efforts:

ILO Conventions have been ratified.
Workers take full part in National Agenda 21 discussions and implementation.

The degree of organizing in Finland is high, about 80 %. There are labour trustees, representatives, advocates and committees in the work places, taking care of working conditions and labour welfare. In addition to conventional duties, like ensuring that workers´ security and health are taken care of in the working environment, advocates and committees are also authorized to look after protection of the environment in broader sense.
Trade Unions and their local units are increasingly interested in environmental issues. They have their representatives in the Finnish Commission on Sustainable Development and in its divisions.
Young people in labour the market are typically persons who have graduated from vocational school after passing the comprehensive school. However, the educational gap threathens to get broader in older generations, especially if those in question are faced with the unemployment. The essential way of alleviating unemployment is to broaden the right to education, which will be the Trade Union´s main mission during the upcoming years.

STATUS REPORT ON PARTICIPATION BY MAJOR GROUPS AT THE NATIONAL AND LOCAL LEVELS

30: STRENGTHENING THE ROLE OF BUSINESS AND INDUSTRY.

30.6 increasing the efficiency of resource use, including reuse, recycling, and reduction of waste per unit of economic output:

There are governmental policies encouraging the above objective and requiring recycling etc.

30.18.a Encouraging the concept of stewardship in management and use of natural resources by entrepreneurs.

Reducing the amount of waste and recycling of materials have become major goals. At the moment, half of Finland's industrial waste is recycled, a quarter is stockpiled and another quarter is transported directly to dumps or for other final treatment.

Due to its natural resources base, Finland's industrial production is based on energy-intensive heavy industry. The consumption of energy is nevertheless efficient by international standards. Environmental protection standards in heavy industry stand up well to international comparison also with respect to efficiency in use of raw materials as well as reduction in emissions. Water and air pollution have been reduced substantially both by improvements in processing techniques as well as by cleaning emissions.

The main focus in the development of environmental taxes has been placed upon the imposition of energy taxes. Fossil fuels are taxed consistently, using a single carbon coefficient. A consistent tax component proportional to energy content are fixed for all sources of primary energy except wood, wind power and waste.

The biggest Finnish enterprises have committed themselves to the ICC´s Business Charter for Sustainable Development. In addition, major chemical companies follow the Responsible Care Programme. Many firms are introducing a variety of environmental management tools, such as environmental management systems, environmental auditing, and life-cycle assessment.

Particularly successful actions in the field of promoting ecological ways of production have been the Environmental Impact Assessment Act; financial incentives, subsidies, taxation, charges and return systems for recoverable goods on an environmental basis; voluntary agreements between business and Government in dealing with environmental problems; EU-regulation on environmental management systems; the new Waste Act (came into force 1 January 1994); the Nordic Eco-Labelling System, whereby a product is analyzed from the standpoint of its entire life-cycle; the Programme on Energy Conservation for 1992-96; and practices in enterprises (ICC Business Charter, RC, environmental monitoring systems etc.)

In 1995, the confederation of Finnish Industrial Employers launched its new environmental policy, entitled "Know-how, Partnership and Eco-competitiveness". One of its main messages is that environmental protection is not just a burden, but can be seen as an opportunity, too. Environmental soundness has become an important component of competitiveness, just like price and quality.

Another central message is that success in environmental protection requires high level know-how as well as open and close cooperation - partnership - within business and industry itself and between industry and its stakeholders.

The new policy is being implemented e.g. through the work of industrial branch organizations. Special emphasis will be laid on small and medium-sized enterprises.

Small and medium-sized enterprises have adopted the sustainable development policies more slowly than bigger ones. However, over 90% of Finnish enterprises are small, comprising fewer than ten persons per enterprise. Exporting companies - big or small - are nevertheless obliged to take environmental issues into consideration because the environmental climate in many European countries is very stong. It can be said that the consumers in other European countries have had a positive impact on sustainable development policies in Finnish enterprises.

30.18.b Increasing number of enterprises that subscribe to and implement sustainable development policies.

Most big and a few small and medium sized enterprises have adopted sustainable development policies.

STATUS REPORT ON PARTICIPATION BY MAJOR GROUPS AT THE NATIONAL AND LOCAL LEVELS

Ch. 31: SCIENTIFIC AND TECHNOLOGICAL COMMUNITY.

31.3.b improving exchange of knowledge and concerns between s&t community and the general public:
Scientific community has already established ways in which to address the general public and deal with sustainable development.

31.9 developing, improving and promoting international acceptance of codes of practice and guidelines related to science and technology and its role in reconciling environment and development.

The significance of the knowledge gained by research in supporting social, cultural and other societal development has increased. The Academy of Finland has promoted basic research and made its importance and outcome widely known. The Research Council for the Environment and Natural Resources of the Academy has taken the responsibility in studying the environment and natural resources in the context of sustainable development. The Research Council´s fields of research (e.g. ecology, evolutionary biology and taxonomy, biochemistry, molecular biology, forestry, agronomy, ecotoxitology, biotechnology and environmental technology) bring together different perspectives on the conservation of the environment and on sustainable use of natural resources. This kind of research is either basic or applied, even though the emphasis is usually on the latter. However, in many fields it is not rational at all to distinguish basic and applied research. The Council also promotes cross-sectoral studies and adaptability of the research by supporting economic, technical and social research dealing with protection of the environment and the use of natural resources. Advancement of a national innovation system has been vital in all future strategies in Finland lately. Research is an essential part of the system aiming to modify new thoughts, methods or products into practical and beneficial use. In order to utilize the results effectively in society, cooperation among universities, research institutes, administration and business has to be broad and fruitful. Finnish sponsors in science are therefore emphasizing multidisciplinary research and networking of the enterprises, universities and research institutes.

See also Chapter 35.

STATUS REPORT ON PARTICIPATION BY MAJOR GROUPS AT THE NATIONAL AND LOCAL LEVELS

Ch. 32: STRENGTHENING THE ROLE OF FARMERS.

32.5.c promoting and encouraging sustainable farming practices and technologies.

32.5.e developing a policy framework that provides incentives and motivation among farmers for sustainable and efficient farming practices.

The Finnish Agri-Environmental Programme for 1995-1999 (FAEP) is designed to support farmers to undertake sustainable farmers practices and technologies. Some 80,000 Finnish farmers have already in 1995 joined General Agricultural Protection Scheme (GAEPS), which is a part of the programme. This is about 80 % of the farms in Finland and 90% of the total arable area. The GAEPS consists of financial support, and conditions for receiving it. At the moment, any stronger demand would harm the implementation of the programme

32.5.f enhancing participation of organizations of farmers in design and implementation of sustainable development policies.

The Central Union of Agricultural Producers and Forest Owners in Finland takes part in the design of sustainable development policies in many ways. It works together with the authorities and other central organisations in environmental projects. In addition to this, the Union has developed its own programmes and methods to encourage farmers and forest owners to conserve biodiversity and the agricultural landscape.

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AGENDA 21 CHAPTER 33: FINANCIAL RESOURCES AND MECHANISMS

Financial resources and mechanisms are also covered under each sectoral chapter of Agenda 21 where relevant. This summary highlights broader national financial policies, domestic and external (including ODA)

NATIONAL PRIORITY:

STATUS REPORT: The Finnish Development Cooperation Strategy presented to the Parliament in 1993 is clearly based on the principle of sustainable development. Finland supports either bilaterally or multilaterally various basic needs programmes implemented jointly with the local population in fields involving ecologically sustainable production methods, water supply and sanitation, education, agriculture and forestry. This has evolved through the EIA process of bilateral projects, and through participation in the OECD/DAC environmental coherence work. In addition, the Department for Development Cooperation of the Ministry for Foreign Affairs has prepared environmental guidelines and manuals.

In the financial plan for 1994-1996, funds are earmarked for cooperation programmes in Africa to help the countries to comply with their responsibilities towards the global conventions.

Finland's economic assistance programme for Central and Eastern Europe consists of technical assistance and financial support. The aim of cooperation with the Russian Federation is to strengthen the foundations for economic activity and the preconditions for democracy and socially sustainable development. A programme for eliminating the most important environmental problems has been drawn up. There is also cooperation in the field of nuclear safety and energy matters. The aim of cooperation between Finland and the Baltic Republics is to improve the preconditions for business and industry and to develop an infrastructure. Areas of cooperation include environmental protection, agriculture and forestry.

CHANGES IN NATIONAL BUDGET TO ADDRESS SUSTAINABLE DEVELOPMENT: One of the main objectives of the Government policies is the strengthening of the principles of sustainable development in different sectors of society, especially with regard to the management of natural resources and the environment. The development of ecological accounting of both the economy and the Government sector is particularly important.

In Finland, economic data on environmental protection is collected from industries and the public sector. Data on environmental expenditure by industry, based on questionnaires sent to industrial establishments in a sampling survey, has been published yearly since 1994.

With regard to eco-industries, a pilot study was started in 1994, and the final report containing preliminary conclusions on the method of data collection was published in May 1995.

A study on the environmental expenditure in the public sector was started by Statistics Finland in January 1995, and it continued through 1996. The collection of data is based on the book-keeping of the municipalities and central government (Ministry of the Environment, Finnish Environment Institute, 13 regional environmental centres, use and maintenance of water resources, environmental protection, international environmental cooperation with Finland's neighbouring countries, water and environmental administrational, land-use and environmental protection by the communities, oil pollution fee and the nuclear waste fee).

By this method it is possible to derive rough estimates. In order to improve the quality and accuracy of information, questionnaires will also be needed to supplement available information.

Environmental expenditures of the public sector in Finland in 1992-1994 (FIM million) US$ = 5.7 FIM. end 1993.

	1992	1993	1994
Municipalities	456.7	481.8	531.3
Environmental investments	47.4	55.5	104.1
Running costs	409.3	426.2	427.2
Municipal federations	189.7	187.7	..
Environmental investments	160.8	176.0	..
Running costs	20.9	11.8	..
State, total	864.3*	867.2*	1,010.2
Other (funds)	35.5	29.8	17.5
Public sector, total	1,502.7	1,536.7	

* = estimate .. = not yet available

For the years 1995 and 1996 only State budget proposals are available at the moment. For 1995, the State targeted FIM 964.6 million to environmental protection expenditures and some FIM 1.105,8 million for the year 1996.
Finland also publishes a "green budget". "Finland's Natural Resources and the Environment" was first published as an annex for the Government proposal for the 1995 budget, and again as a separate publication for the 1996 budget. These reports review the trends in the main sectors of the economy - industry, forests, energy, transport and agriculture - from the environmental point of view. The next review is planned to be published in connection with the Government's budget proposal for 1997.

NEW ECONOMIC INSTRUMENTS:	1993 R	1994 R	1995 B	1996 BP
Surtax on alcoholic beverages (so-called disposable drink	16	48	90	90
carton tax)	19	19	16	16
Surtax on soft drinks	516	267	-	-
Fertilizer tax	6	6	6	6
Pesticide fee	656	56	-	-
Electricity tax	8,404	9,815	12,500	13,550
Energy taxes, whereof	..	1,140	1,600	1,700
Carbon dioxide	-	760	850	900
Energy	..	7,915	10,050	11,723
Basic tax	21	19	20	20
Oil waste fee	1,609	2,054	3,030	3,600
Motorcar and motorcycle tax	111	80	-	-
Tax on charter flights	2	2	2	2
Water protection fee	34	31	31	31
Oil pollution fee	-	618	1,030	1,040
Vehicle tax (so-called sticker tax)	885	844	890	860
Motor vehicle tax (so-called diesel tax)	-	-	-	300
State waste duty (proposed)	12,279	13,856	17,615	19,515
TOTAL				

R = revenue; B = budget; BP = budget proposal

ELIMINATION OF ENVIRONMENTALLY UNFRIENDLY SUBSIDIES:

In the case of subsidies for environmental protection, the basic principle is to support research and development, and demonstration plants. It is also essential to take into account the EU criteria for government subsidies, and to ensure that Finnish companies are not placed in a less favourable position than their competitors in other countries.
The Environmental Economics Committee proposal for making environmental protection a condition for receiving subsidies to agriculture and forestry in order to reduce point source pollution of the environment and encourage landscape management is an important means for promoting environmental protection in rural areas.
In the future, the precondition for subsidies paid out of various EU funds will be that environmental impact is taken more fully into account than hitherto. It is important for Finland that agricultural subsidies under national subsidy policy do not encourage action harmful to the environment. It is also vital for environmental subsidies to agriculture to reduce pollution effectively.
In the future, the subsidy and grant systems for the restoration and management of our architectural heritage will be developed to ensure that the action called for in the Building Conservation Act can be financially assisted.
Subsidy systems with a harmful effect on the environment, e.g. in the transport sector will be removed.

STATISTICAL DATA/INDICATORS						
	1992	1993	1994	1995	1996	
ODA funding provided (Total US$million)	643.8	355.1	290.1	388		
	Average for 92-93		Average for 94-96			
Net flow of external capital from all sources as % of GDP	0.56%		0.54%			
Other data						

AGENDA 21 CHAPTER 34: TRANSFER OF ENVIRONMENTALLY SOUND TECHNOLOGY, COOPERATION AND CAPACITY-BUILDING

Transfer of environmentally sound technology, cooperation and capacity-building is also covered under each sectoral chapter of Agenda 21 where relevant. This summary highlights broader national policies and actions relating to chapter 34.

NATIONAL PRIORITY:

STATUS REPORT ON LINKS BETWEEN NATIONAL, REGIONAL AND INTERNATIONAL INFORMATION NETWORKS/SYSTEMS:

Environmental soundness is considered to be an integral part of any new technology, and accordingly this means that the development and transfer of EST's is supported in the same way as any new technology. Technology policy is one of the most important parts of Finland's industrial policy, and the Government is both increasing the funding of R&D as well as improving the effectiveness of the existing innovations. More financial and human resources, improved data bases and exchange of information sources/systems and study visits are proposed to improve access to and efficient use of information sources/systems related to environmentally sound technologies.

No case studies or surveys have been implemented assessing the available sources of information or supporting systems and inventories of environmentally sound technology.

The Finnish Foreign Trade Association publishes the Finnish Environmental and Technological Review (ENVIROTEC) yearly. Its sources of information are the following: Technical Research Centre of Finland (VTT); Technology Development Centre (TEKES); Chemical Industry Federation; Central Association of Finnish Forest Industries; Federation of Finnish Metal Engineering and Electrochemical Industries (FIMET); and the Finnish Foreign Trade Association.

Finland's share of environmental technology in the export markets can be raised especially in the markets in close proximity to Finland, provided that financing for the investment can be raised. The most important countries receiving support for the transfers of environmentally sound technologies from Finland are developing countries and the neighboring countries with economies in transition.

A great part of Finland's pre-mixed concessional credits of USD 693 million has been used for transferring environmentally sound technologies, such as pulp and paper, energy production and waste water treatment technologies to developing countries.

FINNFUND was established in order to promote economic and social development in developing countries by transferring human and material resources. Most of the funds have been utilized for projects in forestry as well as in energy and transportation.

In addition, the Technical Research Centre of Finland has actively participated in international cooperation in the field of clean technologies and waste minimization.

Finland has also supported several multilateral assistance programmes and organizations aiming at technology transfer, such as the Global Environmental Facility, the Ozone Fund, UNEP's Clearing house and UNDP.

MEANS OF IMPLEMENTATION:

These include the application of energy and environmental taxes (see ch. 33) and support to the research programmes on alternative energy technologies, such as use of biomass support and impact upon the government initiatives. Although hundreds of post-graduate students have been trained in, e.g. environmental engineering, forestry and fisheries management in the Finnish Universities, problems which are relevant to the development and transfer of new technologies are relevant also to environmentally sound technologies, e.g. lack of financial and human resources as well as innovativeness, and communication problems. The main instruments of the Finnish Fund for Industrial Development Cooperation Ltd. (FINNFUND) are equity participation, loans, guarantees and the financing of feasibility and other pre-investment studies.

• Describe any work being undertaken at the national or local level regarding efforts to promote clean production processes and/or the concepts of eco-efficiency. These processes may include training, preferential financial arrangements, information dissemination and changes in legal or regulatory frameworks.

No information.

• Provide information on the adoption of environmental management systems. National reaction to environmental management system standards such as the ISO 14000 Series and others. Please note efforts made at the national level to promote their adoption and the creation of certification infrastructure in order to facilitate access to these standards to local industry.

No information.

• List and describe programs or work under way to facilitate the transfer of ESTs to small and medium sized enterprises. Please note efforts to facilitate access to financial resources and other transfer strategies.

In 1994-1995, the Confederation of Finnish Industrial Employers (TT), the Ministry of Trade and Industry, the Ministry of the Environment, and the Finnish Environment Agency carried out a joint project regarding sound management of environmental affairs by SMEs. After the cooperation project, further steps for improving environmental management in SME's are being planned. The steps under consideration are the improvement of environmental awareness of SME's as well as the development of tools for assistance and advice.

AGENDA 21 CHAPTER 35: SCIENCE FOR SUSTAINABLE DEVELOPMENT

NATIONAL PRIORITY

STATUS REPORT

The Department of Higher Education and Research of the Ministry of Education, the Academy of Finland, and the universities are the bodies primarily responsible for natural and social sciences and related legislation. The science sector is an advisory member in the Finnish National Commission for Sustainable Development. There are also various scientific institutions directly involved and participating in national decision-making or policy formulation on environment and development. The most important international programmes addressing science for sustainable development in which Finland participates are the EC Research Programme on Environment and Climate, the Energy Research Programme of OECD and the Nordic Environment Research Programme.

The Academy of Finland is funding research programmes to promote sustainable development. The Finnish Research Programme on Climate Change has been completed, the Research Programmes for Sustainable Development, for Ecological Ways of Building and for the Restoration of Damaged Terrestrial and Aquatic Ecosystems are being implemented. LUMO, a joint national multidisciplinary biodiversity research programme of the the Finnish Environment Institute and the Ministry of the Environment, will be completed in 1996. Environmental and sustainable development research is multidiciplinary in character, and carried out across traditional disciplines. That is why no reliable statistics or figures on staff and funding are available. Evaluations to measure the payback level of financial investments allocated to the various initiatives in the area of science for sustainable development are made on university research.

One of the Academy's most important new projects on sustainable development is the Programme for Biodiversity 1996-2002. The programme is aiming at producing adaptable high-level knowledge on the different aspects of biodiversity. Adaptability means action for the protection of biodiversity and integration of protection and use. The Programme tries to create connections between the knowledge and understanding on biodiversity, and the issues concerning economic, juridical, ethical, technological and social problems in developing countries. In this way it is possible to secure the availability of knowledge in different parts of the world and to promote decentralization of natural benefits and transfer of technology to developing countries.

The Convention on Biological Diversity has increased the need for better basic information on biodiversity in decision-making procedures. In Finland, the specific concern in this regard is to get enough appropriate knowledge on the biodiversity of the forests.

The Academy of Finland has recently decided to finance a joint venture studying the Role of Knowledge in the Societies. In order to evaluate the importance of knowledge and research to society, the Academy has launched an evaluation of the state and the level of research.

The United Nations Educational, Scientific and Cultural Organization, UNESCO, has four environment programmes of which the Man and the Biosphere (MAB) is coordinated by the Committee on the Environment and Natural Resources Studies of the Academy. MAB is concentrated on supporting the biosphere areas which can be considered model areas of sustainable development.

STEPS TAKEN TO ENHANCE SCIENTIFIC UNDERSTANDING, IMPROVE LONG TERM SCIENTIC ASSESSMENT, BUILDING OF CAPACITY AND CAPABILITY:

Sustainable development as a way of life is one of the priorities of the development plan for education and university research for the period 1995-2000.

In research on the environment and natural resources and, to an increasing extent in technological research, the focus will be on the prerequisites of sustainable development.

In the European Union, Finland will work to introduce sustainable development into educational and research programmes both as a priniciple and as an object of cooperation.

Educational institutions from compulsory schools to universities will apply the principles of sustainable development to their everyday work (acquisition, waste disposal, energy management, transport, etc.) The results will be assessed in 1999.

STATISTICAL DATA/INDICATORS				
		1991	Latest 1993	
Number of scientirts, engineers and technicians engaged in research and experimental development		21,900		
Total expenditure for research and experimental development (US$eq.)Million current PPP US$		$ 1,609	$ 2,022	
Other data	1980	1990	1992-93	
Number of graduates in the environment and development field	1,012	1,308	1,230	
Number of full time researchers, scientists and engineers in E&D		1,012	1,322	

AGENDA 21 CHAPTER 36: PROMOTING EDUCATION, PUBLIC AWARENESS AND TRAINING

NATIONAL PRIORITY

STATUS REPORT

The implementation of the Agenda 21 Chapter 36: In 1994-1995, the promotion of sustainable development has been included in the national framework of the curricula of comprehensive schools and upper secondary schools and in the core curricula of vocational institutions. The National Board of Education is in most cases the coordinator for Finnish educational establishments participating in international development projects on environmental education such as the MUVIN project (MiljöUnderVisning I Norden - Environmental Education in the Nordic Countries) set up by the Nordic Council of Ministers; the UNESCO Baltic Sea Project; the Finnish-Russian environmental education project on northern forest ecosystems; the GLOBE network for environmental science and education; and the OECD/CERI project on environmental education. Over two hundred educational establishments are participating in different international projects on environmental education.
The Global Challenge project with its national network of experts aims at integrating issues related to the developing world, development cooperation, cultural awareness and intercultural contacts, global topics, sustainable development and tolerance as part of the everyday learning process in comprehensive schools and vocational institutions. The project is sponsored by the National Board of Education and the Ministry for Foreign Affairs.
Cooperation between enviromental authorities and the education sector has increased and improved during the last years. Useful information about the state of the evironment has been produced for the educational institutions.
Finnish young people have actively been participating in the Rescue Mission:Planet Earth indicator project. The Ministry of the Environment financed the translation of the indicator package into Finnish and Swedish - the two official languages in Finland, and in the course of autumn 1996, the package was sent to over a hundred schools to encourage the pupils to develop local ideas for sustainable development. In January 1997, a second Day of Access was organized, where the pupils participating in the project had a chance to discuss sustainable development issues with the decision-makers, including ministers.
The Environment Parliament of the Youth has been organized twice by Finnish Scouts and the Nature League.
In April 1996, in the fourth session of the CSD, Finland gave a national presentation on the work of the Finnish National Commission on Sustainable Development and on environmental education in particular. Finland also included two youth delegates to its delegation.
The Northern Call for the Environment Conference on environmental education and the implementation of Agenda 21 was organized in Finland in summer 1996.

a) Reorientation of education towards sustainable development: Sustainable development as a way of life is one of the priorities of the development plan for education and university research for the period 1995-2000. A programme will be launched for developing didactics of sustainable lifestyles. In the European Union, Finland will work to introduce sustainable development into educational and research programmes both as a priniciple and as an object of cooperation. Educational institutions from compulsory schools to universities will apply the principles of sustainable development to their everyday work (acquisition, waste disposal, energy management, traffic arrangements, etc.) The results will be assessed in 1999.
b) Increasing public awareness: Many NGOs are implementing projects, working for action groups and producing material. Many citizens can be reached through, e.g. the recycling movement. In addition to environmental organizations and congregation, women's and consumer's organizations are also active in making sustainable development known. Since 1994, a magazine on environmental education has been published four times a year by the Finnish National Commission on Sustainable Development. On television, there are many environmental programmes such as the Environmental News every Sunday night at prime time.
c) Promoting training: (See above).

ROLE OF MAJOR GROUPS: There are several scientific associations of particular interest to environment and development, for instance the Association for Environment and Development, the Association for Environmental Education and the Association for Social Environmental Research.

FINANCING AND COST EVALUATION OF THE LABOUR ACTIVITIES: Research related to sustainable development and the environment is funded by several ministries, governmental organizations, the private sector and foundations in Finland. The universities are funded by the Ministry of Education and the Academy of Finland.

FINLAND

STATISTICAL DATA/INDICATORS				
	1980	1990	Latest 1992-93	
Adult literacy rate (%) Male	100	100	100	
Adult literacy rate (%) Female	100	100	100	
% of primary school children reaching grade 5 (1986-97)	100	100*	100	
Mean number of years of schooling			15.4	
% of GNP spent on education	0.61	6.0	6.1 (1994)	
Females per 100 males in upper secondary school	118	133	126 (1994)	
Women per 100 men in the labour force				

Other data

* State of the World's Children Report, UNICEF, 1996

FINLAND

AGENDA 21 CHAPTER 37: NATIONAL MECHANISMS AND INTERNATIONAL COOPERATION FOR CAPACITY-BUILDING IN DEVELOPING COUNTRIES

National capacity building is also covered under sectoral chapters.
Donors: You may wish to describe here how Agenda 21 has influenced your ODA policies in this area.
Developing countries: You may wish to describe any new national mechanisms for capacity building - and any changes in technical cooperation.

NATIONAL PRIORITY:

STATUS REPORT ON NATIONAL ENDOGENOUS CAPACITY BUILDING:

Finland supports capacity-building both through multilateral and bilateral channels. One of the main multilateral channels is UNDP and its Capacity 21 programme.
In bilateral aid, one of the key goals is the reduction of poverty. In its efforts to achieve functional results in the alleviation of poverty the Government of Finland will, in accordance with the decision-in-principle on Finland's development cooperation (12.9.1996):

- channel assistance directly into the development of human resources and independent capacities of developing countries;
- emphasize the importance of basic education and health services as crucial for enabling the poor to participate;
- focus increasingly on the security of food supply in developing countries and its promotion by their environmentally sustainable independent production of food; and
- step up action aimed at strengthening the participation of women in social and economic activities.

Finland is also active in promoting sustainable development in developing countries. According to the above-mentioned decision-in-principle the Government will, for example:

- emphasize the importance of environmental considerations in all activities with a view to forestalling threats, and creating conditions conducive to prosperity based on the sustainable use of natural resources;
- support environmental programmes and the development of environmental administration;
- take into account the principles of sustainable development in supporting agricultural and forestry programmes;
- support developing countries in fulfilling their environmental obligations; and
- practise and further develop procedures emphasizing the independent decision-making authority and participation of the partner in cooperation and relevant interest groups.

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AGENDA 21 CHAPTER 38: INTERNATIONAL INSTITUTIONAL ARRANGEMENTS

Ch. 38: Brief summary of any particular UN System response affecting this country/state:

Since 1992, Finland has provided new and additional grant funds for sustainable development as follows:
US$ 45.7 million for the Global Environment Facility GEF;
US$ 4.1 million to the Multilateral Ozone Fund (Montreal Protocol); and
US$ 77 million (credits converted to grants; Peru and Poland).

AGENDA 21 CHAPTER 39 INTERNATIONAL LEGAL INSTRUMENTS AND MECHANISMS

NATIONAL PRIORITY

Ch. 39: International Legal Instruments are covered under the relevant sectoral chapters. This is a listing of major agreements/conventions (not already covered) entered into and relevant to Agenda 21:

Observation:
The Nordic Research Project on the Effectiveness of Multilateral Environmental Agreements was commissioned by the Nordic Council of Ministers' environment sector in autumn 1994. It relates to the Nordic Strategy for the Environment, and is directed to the development and enhancement of implementation and verification of multilateral environmental agreements. The project is administered by the Finnish Ministry of the Environment.
A report released in November 1995 aims at presenting the general framework for the issues involved and deals with some of the important aspects related to the implementation, verification and enforcement of multilateral environmental agreements (MEAs). Another report, published in September 1996, provides a deeper analysis of seven specific treaties. The project continues until the end of 1997 with research on the Convention on the Protection of the Marine Environment of the Baltic Sea Area and the Convention on Biological Diversity.

The major Conventions:
* The United Nations Framework Convention on Climate Change (entry into force in Finland 1.8.1994)
* The United Nations Convention on Biological Diversity (entry into force in Finland 25.10.1994)
* Convention to Combat Desertification (ratified in 20 September 1995).

See also Annex and Chapter 8.

AGENDA 21 CHAPTER 40: INFORMATION FOR DECISION-MAKING

This chapter is also covered under sectoral and other chapters of this profile. The matrix below gives an overview of how national authorities rate the available information for decision making.

Rating of available data and information suitable for decision-making

Agenda 21 Chapters		Very good	Good	Some good data but many gaps	Poor	Remarks
2.	International cooperation and trade	x				
3.	Combating poverty		x			
4.	Changing consumption patterns		x			
5.	Demographic dynamics and sustainability	x				
6.	Human health	x				
7.	Human settlements		x			
8.	Integrating E & D in decision-making			x		
9.	Protection of the atmosphere	x				
10.	Integrated planning and management of land resources		x			
11.	Combating deforestation	x				
12.	Combating desertification and drought		x			
13.	Sustainable mountain development			x		
14.	Sustainable agriculture and rural development			x		
15.	Conservation of biological diversity		x			
16.	Biotechnology		x			
17.	Oceans, seas, coastal areas and their living resources			x		
18.	Freshwater resources	x				
19.	Toxic chemicals		x			
20.	Hazardous wastes	x				
21.	Solid wastes		x			
22.	Radioactive wastes	x				
24.	Women in sustainable development		x			
25.	Children and youth		x			
26.	Indigenous people		x			
27.	Non-governmental organizations	x				
28.	Local authorities	x				
29.	Workers and trade unions		x			
30.	Business and industry	x				
31.	Scientific and technological community	x				
32.	Farmers		x			
33.	Financial resources and mechanisms		x			
34.	Technology, cooperation and capacity-building	x				
35.	Science for sustainable development			x		
36.	Education, public awareness and training	x				
37.	International cooperation for capacity-building			x		
38.	International institutional arrangements		x			
39.	International legal instruments	x				
40.	Information for decision-making		x			

Additional Comments

The information in the matrix reflects the quality of the nationally available data and information necessary for Finland to address the various chapters of Agenda 21. Generally speaking, the availability of data and information is good to very good, with some gaps in certain areas.

In spring 1996, the Ministry of the Environment started to specify the goals for sustainable development in more detail together with other ministries and organizations. A Government Action Plan on Sustainable Development with concrete short-term definitions and proposals and long-term scenarios is under preparation. The action plan will address the following four key areas: sustainable energy economy; human settlements and traffic; production, products, trade and consumption; and finally rural areas. For monitoring purposes, indicators will be developed simultaneously with the action plan.

Finland finds the development of indicators for SD very important. Finland hosted an open-ended intergovernmental seminar of experts on criteria and indicators for sustainable forest management in Helsinki in 19-22 August 1996.

There has been an effort to establish a comprehensive information framework at the national level by integrating environmental and developmental information. There has been a gradual expansion of environmental statistics during the last ten years. Integration of environmental quality data and data on socio-economic driving forces, etc. is setting new demands for the development of the statistical framework. The internationally comparable framework for statistics facilitates integration of environmental pressures and socio-economic statistics, development of sustainability indicators as well as comprehensive assessment such as environment and nature resource accounting in the near future.

The geographic information system (GIS) represents the most recent development of tools and services for decision-making.

The information frameworks for statistics and geographical data provide a basis for integration of data and compilation of publications like statistical yearbooks, Environmental Data Compendium and the State of the Environment Report. In 1994, more effort was put into the integration of environmental and socio-economic questions in the State Budget for 1995, 1996 and 1997; a special annex on natural resources and the environment was produced for decision-making purposes.

The data needs for sustainability assessment cover a rather wide field of socio-economic and environmental information. Often the basic data on agriculture, forestry, industry etc. form a starting point for sustainability evaluations of sectoral activities that will be linked to special datasets on environmental pressures and environmental quality.

A comprehensive inventory on existing databases and registers was conducted in 1991 for the Development Programme for Statistics on the Environment and Natural Resources for 1991-2000. There have also been some sectoral environmental inventories, e.g. in forestry and agriculture. There are about 200 environmentally relevant datasets in Finland.

Networks and computers with access to international information systems are generally available throughout both the public and private sectors. Finland has the capability to access remote sensing data.

The main problems of data content concern sectoral activities that have an extensive impact on the ecosystem and environmental media, e.g. forestry and agriculture. Shortcomings in these fields relate to specific pressures and impacts, not to the basic statistics. As needs for comprehensive assessment are very typical for sustainability evaluations, poor compatibility of data sets hinders proper evaluation of caused relationships between economic activities and their environmental impacts.

The development of sustainability indicators is proceeding as sector specific (e.g. forestry), as media-oriented (e.g. water quality) or as problem-oriented (e.g. biodiversity) development work in research institutes, in the administration and in Statistics Finland. The indicators available are indicators for sustainable forestry and the degree of pollution in the air, water and ground.

STATISTICAL DATA/INDICATORS			
	1989	1993	Latest 1995
Number of telephone subscriptions / 100 inhabitants	52.0	54.4	54.7
Number of portable phone subscriptions / 100 inhabitants	3.8	9.3	24.8 (1.7.1996)